U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS.

THE CHEMICAL COMPOSITION

OF

AMERICAN FOOD MATERIALS.

BY

W. O. ATWATER, Ph. D.,

AND

A. P. BRYANT, M. S.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1899.

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BULLETIN NO. 28 (REVISED EDITION).

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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS,
Washington, D. C., March 31, 1899.

SIR: I have the honor to transmit herewith a tabulated summary of analyses made in the United States of materials used for the food of man, prepared by W. O. Atwater, Ph. D., and A. P. Bryant, M. S., under instructions from the Director of this Office. This compilation is a revision of an earlier bulletin of this Office bearing the same title. Since the first edition was published a large number of analyses of foods have been made in connection with the nutrition investigations conducted under the auspices of this Department. Other analyses have been reported by the experiment stations, as well as a large number by the Division of Chemistry of this Department.

In the present publication it is the intention to give the maximum, minimum, and average of all available analyses of American food products up to January 1, 1899, with the exception of milk, butter, and other dairy products, and sugars. The number of analyses of such products is so great and the literature of the subject so large that a compilation of the results might appropriately form the subject of a special publication.

The literature of the subject has been thoroughly gone over, and the present compilation is based upon over 4,000 analyses. A considerable number of these were made by Professor Atwater and his associates, in Middletown, Conn., and a large number by the Division of Chemistry of this Department. Especial credit is due Mr. R. D. Milner for assistance in compiling the results of analyses.

As a necessary basis of this tabulation the individual analyses have been collated in detail. In many cases the number of analyses of a single product was considerable, and it is believed that the averages which are given in the tables may be advantageously used in computing the composition of foods used in dietary studies, etc. In the present form this standard table of food analyses is more complete and satisfactory than any table which has preceded it, and its publication as a revision of Bulletin 28 of this Office is respectfully recommended.

Respectfully,

A. C. TRUE,
Director.

HON. JAMES WILSON,
Secretary of Agriculture.

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INTRODUCTION.

Until about the year 1880 those who wished to know about the chemical composition and nutritive values of food materials were compelled to depend upon analyses of European products, and most of those analyses had been made in German laboratories. During the last two decades American investigations have accumulated and the results have been collated from time to time. Bulletin No. 28 of this Office, entitled The Chemical Composition of American Food Materials, and issued in 1896, gave minimum, maximum, and average figures from a compilation of the analyses of American food materials that were found on record up to July 1, 1895. Since that time the number of analyses of food materials has increased to such an extent that a revision of that bulletin seems desirable. The present bulletin includes American analyses of materials used as food by man, which the compilers have found on record up to January 1, 1899. This table is intended to replace previous ones, and to serve as a standard of reference until it shall, in its turn, be replaced by a larger and more complete compilation.

BRIEF HISTORY OF FOOD ANALYSIS.

The first effective impulse to the systematic investigation of the chemistry of food was given by Liebig some fifty years ago. Nearly all of our definite knowledge of the chemical composition of food materials and their nutritive value, however, has accumulated within comparatively a few years past. The earliest quantitative analyses of food materials which we have found are those of potatoes, reported by George Pearson in England in 1795.[1] In these Pearson estimated the proportions of water, starch, fibrous matter, extractive matters, and ash in kidney potatoes. He also recognized the presence of fat, acids, and sugar. In 1805 Einhoff[2] made somewhat similar analyses of potatoes and rye. In addition to the estimations made by Pearson, he attempted the separation of albumin. In the case of the potatoes he also deter-

[1] Repert. Arts and Manufactures, 3 (1795), pp. 383–400.

[2] Gehlen's Neues Jour. Chem., 4 (1805), pp. 315, 455; 5 (1806), p. 131.

mined several of the constituents of the ash. The earliest European analyses made in such ways as to render them comparable with those of to-day are perhaps those of milk reported by Peligot in 1836,[1] those of feeding stuffs reported by Boussingault in 1836[2] and 1838,[3] and those of milk reported by Boussingault and Le Bel in 1839.[4] The methods of analyses at that time were naturally imperfect. Then, and for some years afterwards, the chief stress was laid upon the proportions of carbon and nitrogen, though efforts were made to determine the proportions of fats, carbohydrates, and nitrogenous compounds. Liebig and his followers—Playfair, Boeckman, and others—about 1840 and later, analyzed a considerable number of foods and feeding stuffs by methods more or less analogous to those now followed. Indeed, during the period from 1840 to 1865, many more or less accurate analyses of foods and food products were made. Often the elementary composition was determined, although many analyses are recorded in which the attempt was made to learn the proximate composition. The methods of determining inorganic compounds were more satisfactory than those for organic compounds, and the early literature reports many determinations of the ash constituents of foods and food products.

Much interest attaches to American work of this nature. The earliest which we have found is the ash analysis of rice, rice flour, husk, etc., reported by C. U. Shephard.[5] He also reported ash analysis of Indian corn and sweet potatoes.[6] In 1848 Salisbury published his prize essay entitled "Maize, or Indian corn."[7] This is a very comprehensive study of the corn plant. A large number of ash analyses of the grain and different parts of the plant are reported, as well as proximate analyses of different sorts of corn. The constituents determined were starch, sugar and extract, fiber, "matter obtained from fiber by a weak solution of potash," albumin, casein, zein, gluten, oil, dextrin or gum, and water. Although these analyses have been superseded by those made in recent years by more accurate methods, it is interesting to compare Salisbury's results with the results of later analyses. For instance, if the sum of the nitrogenous constituents and of the carbohydrates (separately determined by Salisbury) are considered, the percentage composition of ash-free Pennsylvania yellow dent corn is as follows: Water, 10.2; protein, 9.4; fat, 3.7; and carbohydrates, 73.2. The corn was finely ground for analysis and the result may be fairly compared with that of unbolted corn meal (see p. 56). In 1848 and 1849 Beck[8] reported the proximate composition of a large number of samples of wheat and

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[1] Ann. Chim. et Phys., 2. ser., 62 (1836), p. 432.

[2] Ibid., 63 (1836), p. 225.

[3] Ibid., 67 (1838), p. 408.

[4] Ibid., 71 (1839), p. 65.

[5] Trans. New York State Agr. Soc., 1844, p. 343; Amer. Quart. Jour. Agr. and Sci., 1 (1845), p. 122.

[6] Amer. Quart. Jour. Agr. and Sci., 1 (1845), p. 130.

[7] Trans. New York State Agr. Soc., 1848, p. 678.

[8] U. S. Patent Office Rpts., Agr., 1848, p. 245; 1849, p. 49.

flour. The constituents determined were water, bran, gluten, starch and glucose, dextrin, etc.

In 1849 Emmons[1] published a considerable number of analyses similar to those made by Salisbury of oats, barley, millet, rye, corn, buckwheat, and wheat. Emmons also reported analyses of tomatoes, carrots, beets, parsnips, beans, squash, eggplant, potatoes, and sweet potatoes.[2] Analyses of several sorts of cabbage and of cauliflower and turnip-rooted cabbage (kohl-rabi) made by Salisbury are quoted in Emmons's report.[3] In 1857 Jackson[4] reported proximate analyses of several varieties of corn and of Chinese yam and potatoes.

Much of this earlier work is interesting to-day, chiefly from a historical standpoint. The analyses in most instances were very carefully made, but accurate methods of organic and analytical chemistry had not yet been developed. A great advance was possible when Henneberg and his associates elaborated the so-called Weende method for proximate analysis. While this is based on earlier work, the methods were simplified and systematized. It was not until this new method came into general use, about 1864, that any considerable number of chemists undertook a systematic study of food materials from the standpoint of their nutritive values. The Weende method has been used for over thirty years in Europe, America, and other countries. Individual investigators and associations of chemists have studied its details and devised ways by which it might be improved. Minor alterations have been adopted, and in several countries details have been agreed on officially by organizations representing experiment stations and Government officers charged with the responsibility of making analyses in the interests of the public. The methods followed in different countries agree so closely, that for the last twenty years it has been possible to accept analyses by chemists in different parts of the world and compare them one with another without hesitation. The first analyses made by these methods in the United States of which a record has been found were a series of analyses of Indian corn in 1869.[5] Excepting the investigations of Professor Storer, at the Bussey Institute, little work in this line was done until the establishment of the experiment stations. Since that time a large number of analyses have been made. Jenkins and Winton's Compilation of Analyses of American Feeding Stuffs includes analyses of grain and vegetables, and is reasonably complete up to 1891.

Upward of 200 analyses of food fishes, oysters, etc., were published in the Report of the United States Commissioner of Fish and Fisheries for 1888, and a much larger number of analyses of canned vegetables, cereal products, etc., have been reported by the Division of

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[1] Nat. Hist. New York, pt. 5, Agr., 2 (1849), p. 90.

[2] Ibid., pp. 37, 55, 295.

[3] Ibid., p. 248.

[4] U. S. Patent Office Rpts., Agr., 1857, pp. 160–165.

[5] On the proximate composition of several varieties of American maize, by W. O. Atwater, American Journal of Science and Arts, 47 (1869), No. 11, p. 352.

Chemistry of the United States Department of Agriculture. Many analyses of animal and vegetable food materials have been made in connection with the nutrition investigations carried on under the direction of this Office. In the compilation from which the figures in the present bulletin are taken the results of all these have been included, as well as the analyses, made by W. O. Atwater and associates, of some 500 specimens of food materials at the instance of the World's Columbian Commission and not yet published in detail. Analyses of American food materials made in foreign countries and analyses of foreign food materials made in this country have been included only in exceptional cases.

In collating the material for the present compilation the results of over 1,000 unpublished analyses made in connection with the nutrition investigations conducted with the cooperation of the Storrs (Connecticut) Station and this Department at the chemical laboratory of Wesleyan University have been included, as well as a number of unpublished analyses made by the Maine Station.

No attempt has been made to collect all of the published analyses of milk, butter, and sugars. Such a task would be difficult, because of the large number of analyses made for inspection and otherwise and the number and diversity of the publications in which they are scattered. The figures given in the table on pages 54, 55, and 65 are estimates based upon the data conveniently at hand, and suffice to show the range of variation of the average composition.

The following tabular statement shows the number of specimens of each of the several classes of foods included in this compilation. As a rule figures for the composition of the quarters and sides of meat were calculated from the composition and weight of the cuts making up the larger portion, and are not included in the estimate as direct analyses. The number of sides thus analyzed were, beef, 13; veal, 6; lamb, 3; mutton, 32; pork, 11.

Number of analyses of specimens of American foods included in the compilation from which the figures in the tables of composition of foods were obtained.

Food materials.	Food and nutrition investigations.		Division of Chemistry, U. S. Department of Agriculture.	Miscellaneous.	Total.
	Atwater and associates.	Other investigators.			
ANIMAL FOOD.					
Beef	379	148	0	8	535
Veal	91	16	0	0	107
Lamb and mutton	122	9	0	0	131
Pork	120	40	88	0	248
Sausage	40	6	0	0	46
Poultry and game	23	28	0	0	51
Fish	133	10	0	0	143
Shellfish	66	6	0	0	72
Eggs	20	17	0	53	90
Cheese	8	14	8	47	77
Condensed milk	4	1	0	28	33
Miscellaneous	17	16	0	52	85
Total animal-food materials	1,023	311	96	188	1,618

Number of analyses of specimens of American foods included in the compilation from which the figures in the tables of composition of foods were obtained—Continued.

Food materials.	Food and nutrition investigations.		Division of Chemistry, U. S. Department of Agriculture.	Miscellaneous.	Total.
	Atwater and associates.	Other investigators.			
VEGETABLE FOOD.					
Flours, meals, etc.:					
Barley, buckwheat, corn, and rye	19	51	13	23	106
Oats	18	29	7	11	65
Rice	4	11	1	15	31
Wheat preparations, etc	9	34	16	15	74
Macaroni and vermicelli	24	3	4	1	32
Wheat flours	57	87	112	59	315
Bread, crackers, and pastry	87	262	159	0	508
Sugars and starches	4	10	22	12	48
Total flours, sugars, etc	222	487	334	136	1,179
Vegetables:					
Beans and other legumes	21	45	152	10	228
Roots	2	28	29	34	93
Potatoes and sweet potatoes	14	34	3	203	254
Other vegetables	16	51	125	52	244
Total vegetables	53	158	309	299	819
Fruits	19	82	16	170	287
Nuts	1	1	0	59	61
Total fruits and nuts	20	83	16	229	348
Miscellaneous	3	21	0	5	29
Total vegetable-food materials	298	749	659	666	2,375
UNCLASSIFIED.					
Soups	35	3	0	0	38
Miscellaneous	4	8	0	20	32
Total unclassified	39	11	0	20	70
Total food materials	1,360	1,071	755	877	4,063

EXPLANATION OF TERMS.

The terms used in reporting analyses of foods and feeding stuffs need some explanation. Some of these terms have a technical meaning which is well recognized and understood by scientists, although the dictionaries and similar books of reference have not yet included these uses in their definitions. In other cases the same word has been used by scientists in different ways. The more usual terms are defined and explained below in the sense in which they are employed in this bulletin and other publications of this Office.

COMPOSITION OF FOOD MATERIALS.

Ordinary food materials, such as meat, fish, eggs, potatoes, wheat, etc., consist of:

Refuse.—As the bones of meat and fish, shells of shellfish, skin of potatoes, bran of wheat, etc.

Edible portion.—As the flesh of meat and fish, the white and yolk of eggs, wheat flour, etc. This edible portion consists of water (usually

incorporated in the tissue and not visible as such), and nutritive ingredients or nutrients.

The principal kinds of nutritive ingredients are protein, fats, carbohydrates, and ash or mineral matters.

The water and refuse of various foods and the salt of salted meat and fish are called nonnutrients. In comparing the values of different food materials for nourishment they are left out of account.

Protein.—This term is used to include nominally the total nitrogenous substance of animal and vegetable food materials, exclusive of the so-called nitrogenous fats. Actually it is employed, in common usage, to designate the product of the total nitrogen by an empirical factor, generally 6.25.

This total nitrogenous substance consists of a great variety of chemical compounds, which are conveniently divided into two principal classes, proteids and nonproteids.

The term proteid, as here employed, includes (1) the simple proteids, e. g., albuminoids, globulins, and their derivatives, such as acid and alkali albumins, coagulated proteids, proteoses, and peptones; (2) the so-called combined or compound proteids; and (3) the so-called gelatinoids (sometimes called "glutinoids") which are characteristic of animal connective tissue.

The term albuminoids has long been used by European and American chemists and physiologists as a collective designation for the substances of the first two groups, though many apply it to all three of these groups. Of late a number of investigators and writers have employed it as a special designation for compounds of the third class.[1]

The term nonproteid is here used synonymously with nonalbuminoid, and includes nitrogenous animal and vegetable compounds of simpler constitution than the proteids. The most important animal compounds of this class are the so-called "nitrogenous extractives" of muscular and connective tissue, such as creatin, creatinin, xanthin, hypoxanthin, and allied cleavage products of the proteids. To some of these the term "meat bases" has been applied. The latter, with certain mineral salts (potassium phosphates, etc.), are the most important constituents of beef tea and many commercial "meat extracts."

The nonproteid nitrogenous compounds in vegetable foods consist of amids and amido acids, of which asparagin and aspartic acid are familiar examples.

The ideal method of analysis of food materials would involve quantitative determinations of the amounts of each of the several kinds or groups of nitrogenous compounds. This, however, is seldom attempted. The common practice is to multiply the percentage of nitrogen by the factor 6.25 and take the product as representing the total nitrogenous

[1] U. S. Dept. Agr., Office of Experiment Stations Bul. 65, p. 118.

substance. For many materials, animal and vegetable, this factor would be nearly correct for the proteids, which contain, on the average, not far from 16 per cent of nitrogen, although the nitrogen content of the individual proteids is quite varied. The variations in the nitrogen of the nonproteids are wider, and they contain, on the average, more than 16 per cent of nitrogen. It is evident, therefore, that the computation of the total nitrogenous substance in this way is by no means correct. In the flesh of meats and fish, which contain very little of carbohydrates, the nitrogenous substance is frequently estimated by difference, i. e., by subtracting the ether extract and ash from the total water-free substance. While this method is not always correct, it is oftentimes more nearly so than the determination by use of the usual factor.

The distinction between protein and proteids is thus very sharp. The latter are definite chemical compounds, while the former is an entirely arbitrary term used to designate a group which is commonly assumed to include all of the nitrogenous matter of the food except the nitrogenous fats.

In the tables herewith the common usage is followed, by which the protein is given as estimated by factor, i. e., total nitrogen multiplied by 6.25. In the analyses of meats and fish, however, the figures for protein "by difference" are also given. Where the proteid and nonproteid nitrogenous matter have been estimated in a food material the proportions are indicated in a footnote.

Fats.—Under fats is included the total ether extract. Familiar examples of fat are fat of meat, fat of milk (butter), oil of corn, olive oil, etc. The ingredients of the "ether extract" of animal and vegetable foods and feeding stuffs, which it is customary to group roughly as fats, include with the true fats various other substances, as fatty acids, lecithins (nitrogenous fats), and chlorophylls.

Carbohydrates.—Carbohydrates are usually determined by difference. They include sugars, starches, cellulose, gums, woody fiber, etc. In many instances separate determinations of one or more of these groups have been made. The determinations of "fiber" in vegetable foods, i. e., substances allied to carbohydrates but insoluble in dilute acid and alkali, and somewhat similar to woody fiber, are given in a separate column. The figures in parentheses in the crude-fiber column show the number of analyses in which the fiber was determined. The figures for "total carbohydrates" include the fiber, as well as sugars, starches, etc. Where the sugars or starches have been determined separately footnotes are added giving the average results.

Ash or mineral matters.—Under this head are included phosphates, sulphates, chlorids, and other salts of potassium, sodium, magnesium, and other metallic elements. Where analyses of the mineral matters have been found they are added in the form of footnotes. These results usually give the percentage composition of the ash as produced by

incineration rather than the proportions in which the different mineral ingredients occur in the food material.

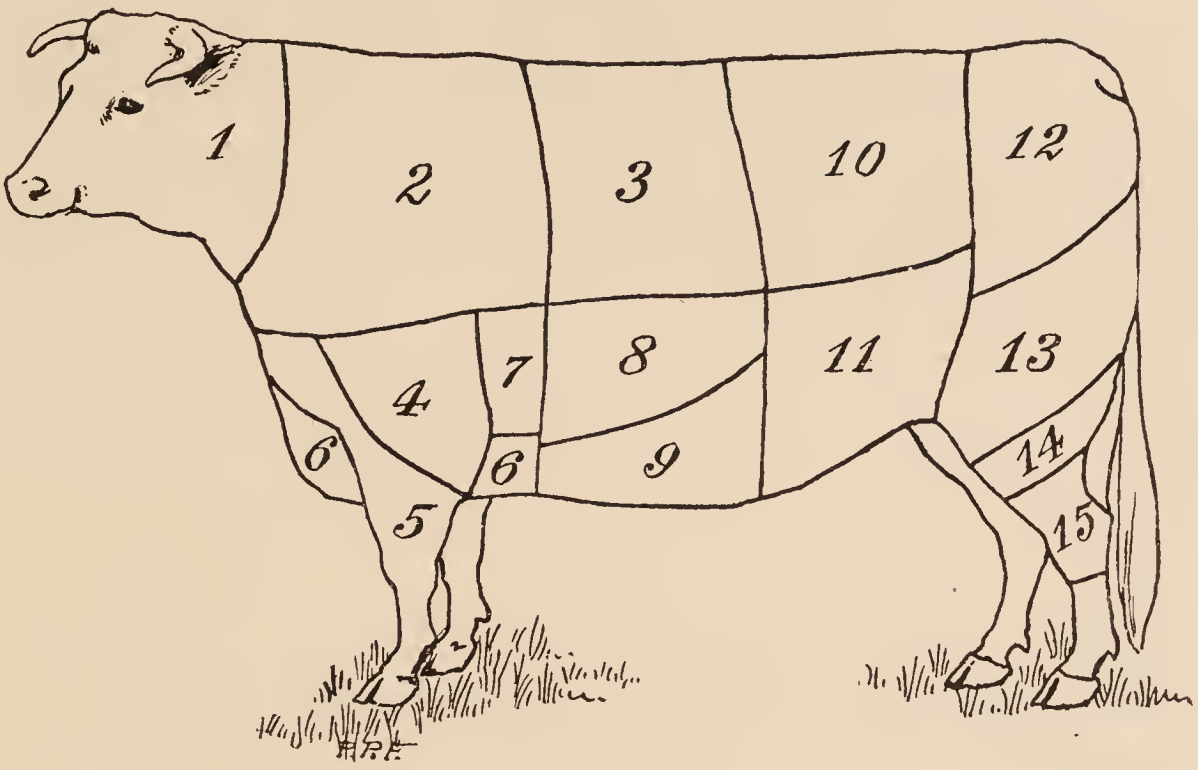
Fuel value.—By fuel value is meant the number of calories of heat equivalent to the energy which it is assumed the body would be able to obtain from one pound of a given food material, provided the nutrients of the latter were completely digested. The fuel values of the different food materials are calculated by use of the factors of Rubner, which allow 4.1 calories for a gram of protein, the same for a gram of carbohydrates, and 9.3 calories per gram of fats. These amounts correspond to 18.6 calories of energy for each hundredth of a pound of protein and of carbohydrates, and 42.2 calories for each hundredth of a pound of fat in the given food material. In the following table the fuel value per pound has been calculated by use of these factors. In these calculations the values of protein by factor have been used in all cases with the exception of salt cod (p. 50) and hens' eggs (p. 53), in which the value of protein by difference was used.

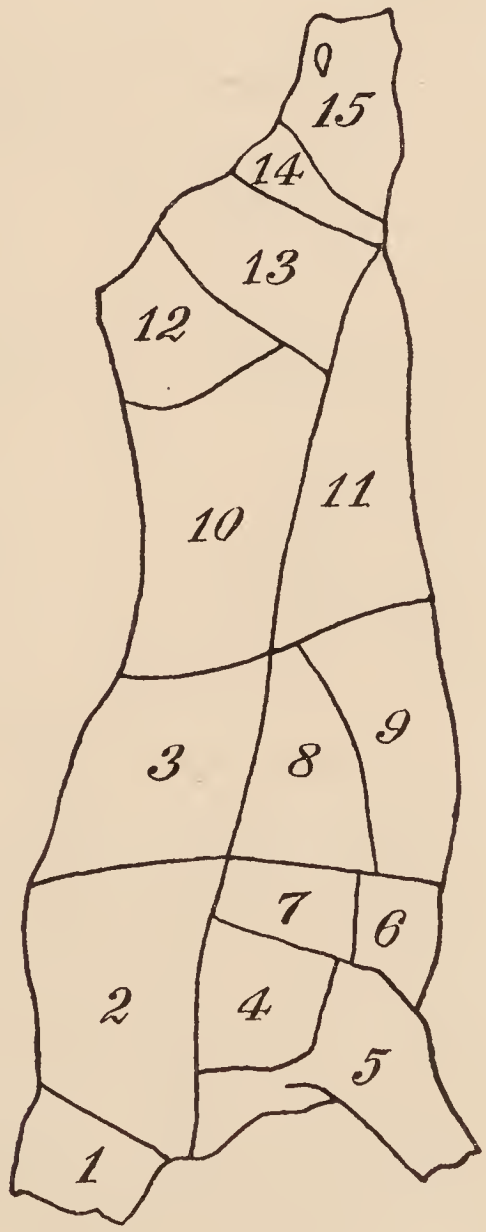
CUTS OF MEAT.

The methods of cutting sides of beef, veal, mutton, and pork into parts, and the terms used for the different "cuts," as these parts are commonly called, vary in different localities. The analyses here reported apply to cuts as indicated by the following diagrams. These show the positions of the different cuts, both in the live animal and in the dressed carcass as found in the markets. The lines of division between the different cuts will vary slightly, according to the usage of the local market, even where the general method of cutting is as here indicated. The names of the same cuts likewise vary in different parts of the country.

The cuts of beef.—The general method of cutting up a side of beef is illustrated in fig. 1, which shows the relative position of the cuts in the animal and in a dressed side. The neck piece is frequently cut so as to include more of the chuck than is represented by the diagrams. The shoulder clod is usually cut without bone, while the shoulder (not indicated in diagram) would include more or less of the shoulder blade and of the upper end of the fore shank. Shoulder steak is cut from the chuck. In many localities the plate is made to include all the parts of the fore quarter designated on the diagrams as brisket, cross-ribs, plate and navel, and different portions of the plate, as thus cut, are spoken of as the "brisket end of plate" and "navel end of plate." This part of the animal is largely used for corning. The ribs are frequently divided into first, second, and third cuts, the latter lying nearest the chuck and being slightly less desirable than the former. The chuck is sometimes subdivided in a similar manner, the third cut of the chuck being nearest the neck. The names applied to different portions of the loin vary considerably in different localities. The part nearest the ribs is frequently called "small end of loin" or "short

steak." The other end of the loin is called "hip sirloin" or "sirloin." Between the short and the sirloin is a portion quite generally called the "tenderloin," for the reason that the real tenderloin, the very tender





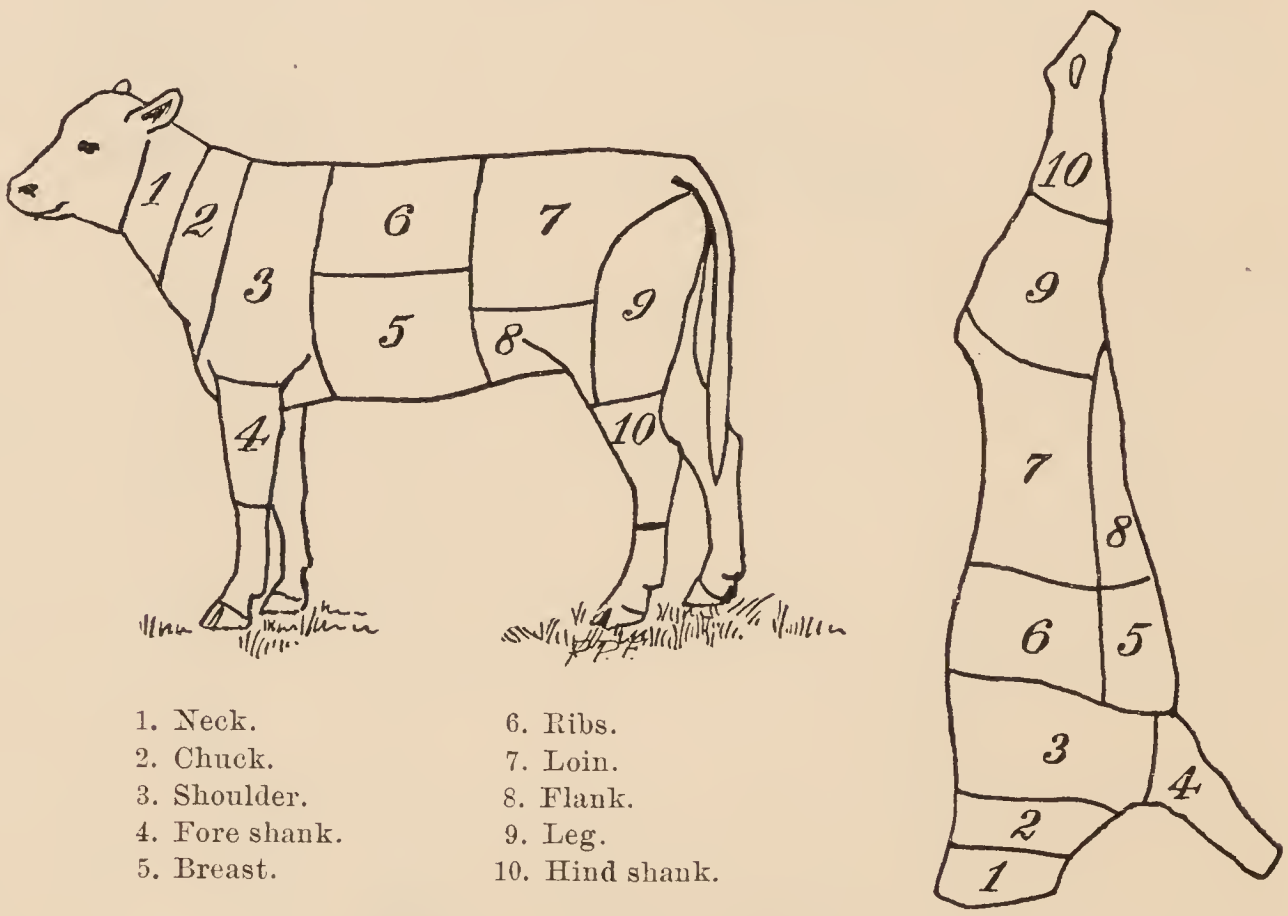
1. Neck.
2. Chuck.
3. Ribs.
4. Shoulder clod.
5. Fore shank.
6. Brisket.
7. Cross ribs.
8. Plate.
9. Navel.
10. Loin.
11. Flank.
12. Rump.
13. Round.
14. Second cut round.
15. Hind shank.

FIG. 1.—Diagrams of cuts of beef.

strip of meat lying inside the loin, is found most fully developed in this cut. Porterhouse steak is a term most frequently applied to either the short steak or the tenderloin. It is not uncommon to find the flank

cut so as to include more of the loin than is indicated in the figures, in which case the upper portion is called "flank steak." The larger part of the flank is, however, very frequently corned, as is also the case with the rump. In some markets the rump is cut so as to include a portion of the loin, which is then sold as "rump steak." The portion of the round on the outside of the leg is regarded as more tender than that on the inside, and is frequently preferred to the latter. As the leg lies upon the butcher's table this outside of the round is usually on the upper, or top, side, and is therefore called "top round." Occasionally the plate is called the "rattle."

The cuts of veal.—The method of cutting up a side of veal differs considerably from that employed with beef. This is illustrated by fig. 2, which shows the relative position of the cuts in the animal and



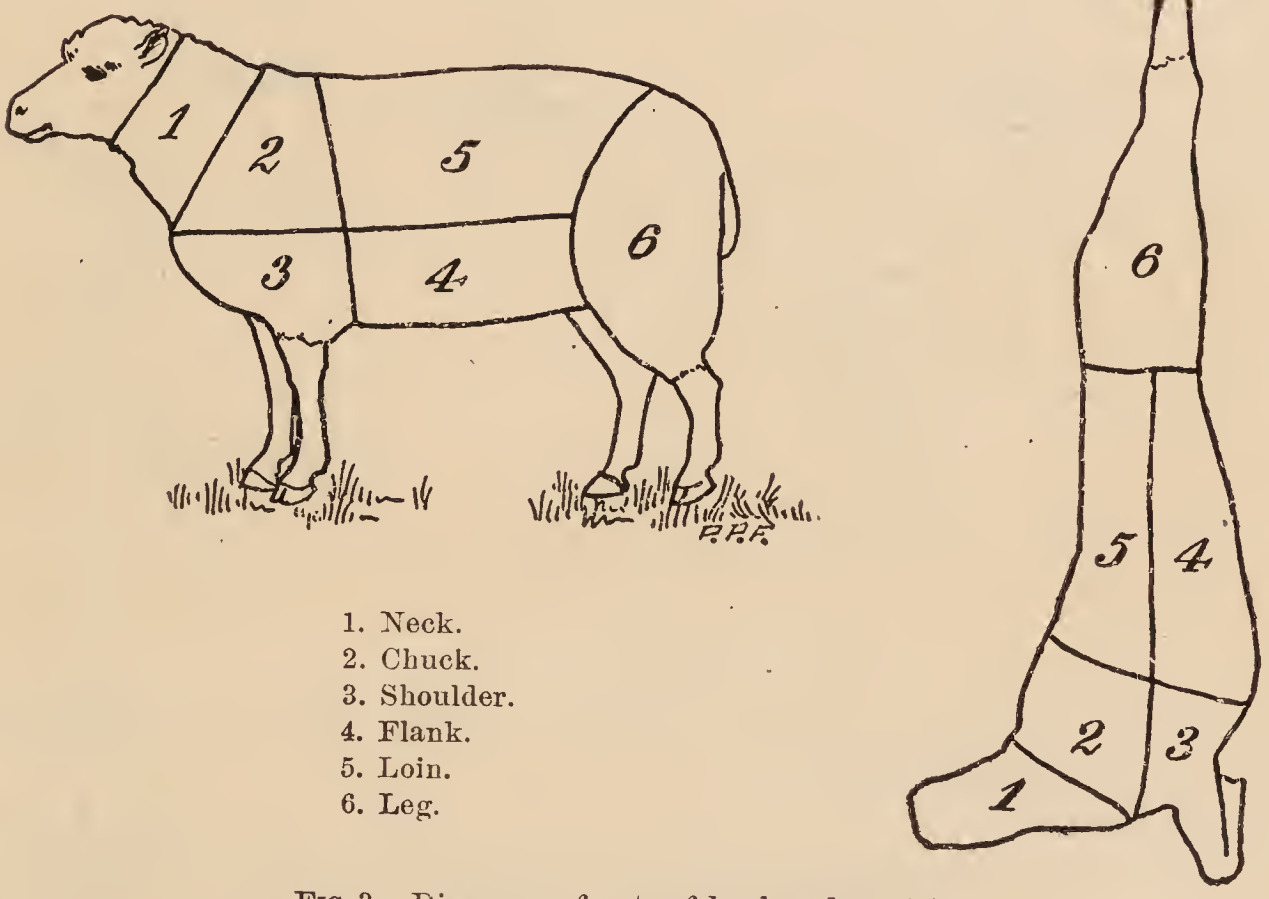
1. Neck.
2. Chuck.
3. Shoulder.
4. Fore shank.
5. Breast.
6. Ribs.
7. Loin.
8. Flank.
9. Leg.
10. Hind shank.

FIG. 2.—Diagrams of cuts of veal.

in a dressed side. The chuck is much smaller in proportion, and frequently no distinction is made between the chuck and the neck. The chuck is often cut so as to include a considerable of the portion here designated as shoulder, following more nearly the method adopted for subdividing beef. The shoulder of veal as here indicated includes, besides the portion corresponding to the shoulder in beef, the larger part of what is here classed as chuck in the adult animal. The under part of the fore quarter, corresponding to the plate in the beef, is often designated as breast in the veal. The part of the veal corresponding to the rump of beef is here included with the loin, but is often cut to form part of the leg. In many localities the fore and hind shanks of veal are called the "knuckles."

The cuts of lamb and mutton.—Fig. 3 shows the relative position of the cuts in a dressed side of mutton or lamb and in a live animal. The

cuts in a side of lamb and mutton number but six, three in each quarter. The chuck includes the ribs as far as the end of the shoulder blades, beyond which comes the loin. The flank is made to include all the under side of the animal. Some butchers, however, make a larger number of cuts in the fore quarter, including a portion of the cuts marked "loin" and "chuck" in fig. 3, to make a cut designated as "rib," and a portion of the "flank" and "shoulder" to make a cut designated as "brisket." The term "chops" is ordinarily used to designate portions of either the loin, ribs, chuck or shoulder, which are either cut or "chopped" by the butcher into pieces suitable for frying or broiling. The chuck and ribs are sometimes called the "rack."



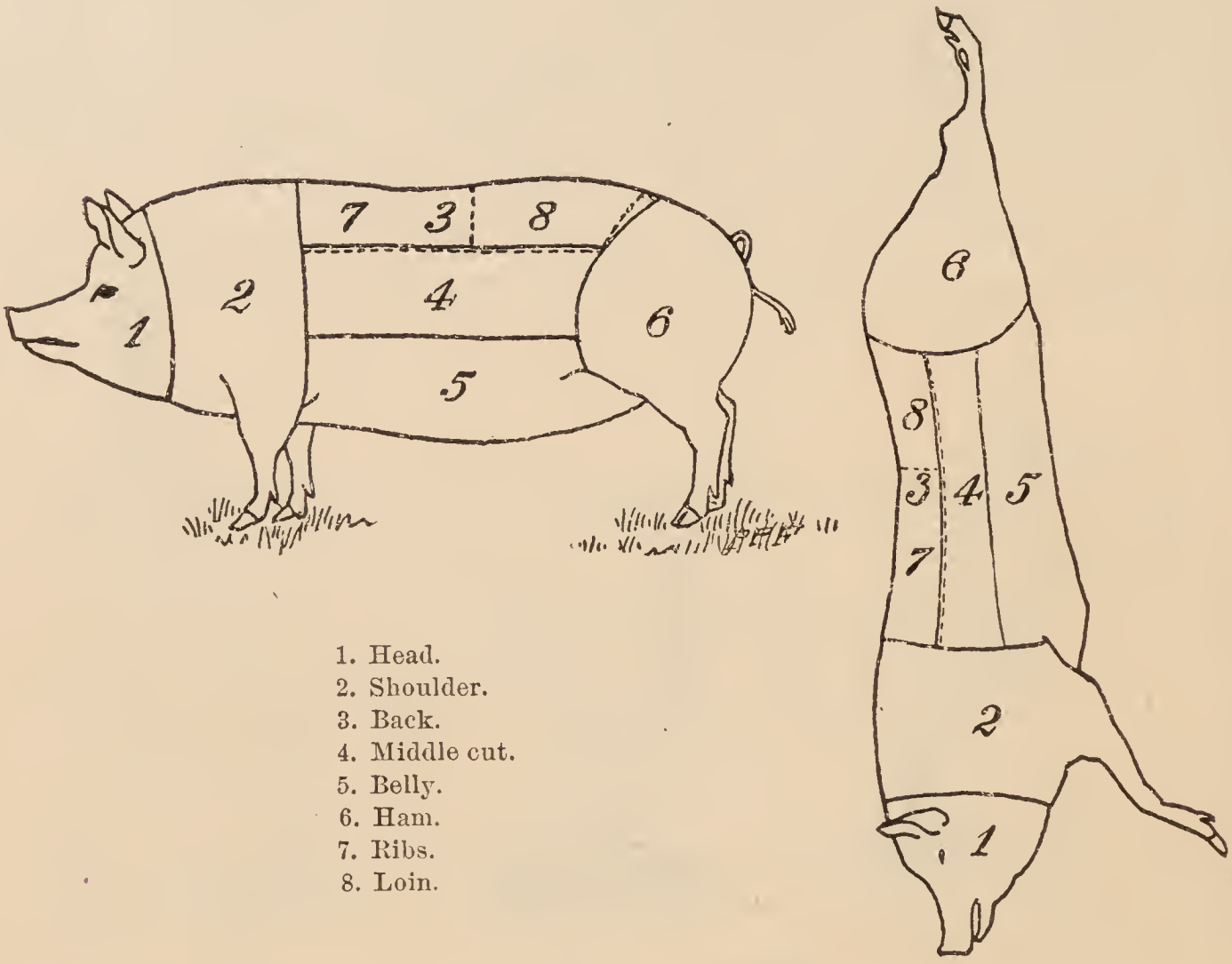
1. Neck.
2. Chuck.
3. Shoulder.
4. Flank.
5. Loin.
6. Leg.

FIG. 3.—Diagrams of cuts of lamb and mutton.

The cuts of pork.—The method of cutting up a side of pork differs considerably from that employed with other meats. A large portion of the carcass of a dressed pig consists of almost clear fat. This furnishes the cuts which are used for "salt pork" and bacon. Fig. 4 illustrates a common method of cutting up pork, showing the relative position of the cuts in the animal and in the dressed side. The cut designated as "back cut" is almost clear fat and is used for salting and pickling. The "middle cut" is the portion quite generally used for bacon and for "lean ends" salt pork. The belly is salted or pickled or may be made into sausages.

Beneath the "back cut" are the ribs and loin, from which are obtained "spareribs," "chops," and roasting pieces, here designated

by dotted lines. The hams and shoulders are more frequently cured, but are also sold fresh as pork "steak." The tenderloin proper is a comparatively lean and very small strip of meat lying under the bones of the loin and usually weighing a fraction of a pound. Some fat is usually trimmed off from the hams and shoulders which is called "ham and shoulder fat" and is often used for sausages, etc. What is called



1. Head.
2. Shoulder.
3. Back.
4. Middle cut.
5. Belly.
6. Ham.
7. Ribs.
8. Loin.

FIG. 4.—Diagrams of cuts of pork.

"leaf lard," at least in some localities, comes from the inside of the back. It is the kidney fat.

As stated above, cuts as shown in the diagrams herewith correspond to those of which analyses are reported in the table beyond, but do not attempt to show the different methods of cutting followed in markets in different parts of the United States.

CHEMICAL COMPOSITION OF AMERICAN FOOD MATERIALS.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD.									
BEEF, FRESH.									
Brisket, medium fat:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	3	.....	47.4	13.7	*14.6*	22.5	.....	0.8	1,265
Maximum	3	.....	59.6	17.1	*17.0*	37.2	.....	.9	1,825
Average	**3**	.....	**54.6**	**15.8**	*16.0*	**28.5**	.....	**.9**	**1,495**
As purchased—									
Minimum	3	14.3	39.5	11.5	*11.4*	18.1	.....	.6	950
Maximum	3	30.4	44.7	12.8	*12.8*	31.9	.....	.7	1,564
Average	**3**	**23.3**	**41.6**	**12.0**	*12.2*	**22.3**	.....	**.6**	**1,165**
Chuck, including shoulder, very lean:									
Edible portion	1	.....	73.8	22.3	*21.3*	3.9	.....	1.0	580
As purchased	1	18.4	60.2	18.2	*17.4*	3.2	.....	.8	475
Chuck, including shoulder, lean:									
Edible portion—									
Minimum	**2**	.....	71.9	19.8	*19.4*	7.7	.....	.9	710
Maximum	2	.....	71.7	20.6	*19.6*	8.7	.....	1.0	735
Average	2	.....	**71.3**	**20.2**	*19.5*	**8.2**	.....	**1.0**	**720**
As purchased—									
Minimum	2	17.4	55.6	15.5	*15.2*	6.4	.....	.7	575
Maximum	2	21.7	59.2	17.0	*16.2*	6.8	.....	.8	585
Average	2	**19.5**	**57.4**	**16.3**	*15.7*	**6.6**	.....	**.8**	**580**
Chuck, including shoulder, medium fat:									
Edible portion—									
Minimum	4	.....	67.1	19.1	*18.0*	10.1	.....	.9	800
Maximum	4	.....	69.5	20.2	*19.4*	14.0	.....	1.0	945
Average	4	.....	**68.3**	**19.6**	*18.9*	**11.9**	.....	**.9**	**865**
As purchased—									
Minimum	4	11.8	55.8	15.5	*15.2*	8.8	.....	.7	630
Maximum	4	18.9	60.3	17.5	*16.8*	12.3	.....	.8	830
Average	4	**15.2**	**57.9**	**16.6**	*16.0*	**10.1**	.....	**.8**	**735**
Chuck, including shoulder, fat:									
Edible portion—									
Minimum	4	.....	59.9	17.6	*17.7*	17.1	.....	.8	1,080
Maximum	4	.....	64.2	19.5	*18.2*	21.1	.....	1.0	1,215
Average	4	.....	**62.3**	**18.5**	*18.0*	**18.8**	.....	**.9**	**1,135**
As purchased—									
Minimum	3	12.0	48.4	14.2	*14.7*	14.8	.....	.6	940
Maximum	3	19.2	55.9	17.0	*16.0*	17.1	.....	.8	985
Average	3	**14.7**	**53.3**	**15.9**	*15.4*	**15.9**	.....	**.7**	**965**
Chuck, including shoulder, very fat:									
Edible portion—									
Minimum	2	.....	50.7	16.8	*16.6*	26.1	.....	.8	1,415
Maximum	2	.....	55.7	17.5	*17.3*	31.9	.....	.9	1,670
Average	2	.....	**53.2**	**17.2**	*16.9*	**29.0**	.....	**.9**	**1,555**
As purchased—									
Minimum	2	11.2	36.5	11.0	*11.3*	17.1	.....	.6	925
Maximum	2	34.5	45.0	15.5	*14.8*	28.3	.....	.7	1,480
Average	2	**22.8**	**40.8**	**13.3**	*13.0*	**22.7**	.....	**.7**	**1,205**
Chuck, including shoulder, all analyses:									
Edible portion	13	.....	65.0	19.2	*18.7*	15.4	.....	.9	1,005
As purchased	12	17.3	54.0	15.8	*15.5*	12.5	.....	.7	820
Chuck rib, very lean:									
Edible portion	1	.....	75.8	22.2	*21.7*	1.4	.....	1.1	470
As purchased	1	16.7	63.1	18.6	*18.1*	1.2	.....	.9	395

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, FRESH—continued.									
Chuck rib, lean:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	11	.....	69.7	14.0	*14.0*	5.8	.....	0.8	625
Maximum	11	.....	73.4	20.5	*20.5*	12.2	.....	1.1	775
Average	**11**	.....	**71.3**	**19.5**	*19.4*	**8.3**	.....	**1.0**	**715**
As purchased—									
Minimum	11	16.1	47.6	11.7	*11.7*	4.5	.....	.7	475
Maximum	11	33.1	61.1	17.0	*16.9*	10.3	.....	.9	655
Average	**11**	**22.7**	**55.1**	**15.1**	*15.0*	**6.4**	.....	**.8**	**550**
Chuck rib, medium fat:									
Edible portion—									
Minimum	7	.....	56.9	17.3	*16.9*	13.9	.....	.9	930
Maximum	7	.....	67.0	19.5	*19.5*	25.3	.....	1.1	1,390
Average	**7**	.....	**62.7**	**18.5**	*18.3*	**18.0**	.....	**1.0**	**1,105**
As purchased—									
Minimum	7	9.8	45.7	13.9	*13.5*	10.9	.....	.7	720
Maximum	7	28.1	60.0	16.5	*16.3*	20.4	.....	.9	1,120
Average	**7**	**16.3**	**52.6**	**15.5**	*15.3*	**15.0**	.....	**.8**	**920**
Chuck rib, fat:									
Edible portion—									
Minimum	2	.....	51.3	16.5	*16.0*	30.3	.....	.7	1,585
Maximum	2	.....	52.8	16.5	*16.1*	32.0	.....	.8	1,655
Average	**2**	.....	**52.0**	**16.5**	*16.1*	**31.1**	.....	**.8**	**1,620**
As purchased—									
Minimum	2	5.4	43.6	14.0	*13.6*	27.2	.....	.6	1,405
Maximum	2	15.0	50.0	15.6	*15.2*	28.6	.....	.8	1,495
Average	**2**	**10.2**	**46.8**	**14.8**	*14.4*	**27.9**	.....	**.7**	**1,455**
Chuck rib, all analyses:									
Edible portion	21	.....	66.8	19.0	*18.8*	13.4	.....	1.0	920
As purchased	21	19.1	53.8	15.3	*15.2*	11.1	.....	.8	755
Chuck, free from all visible fat	1	.....	74.1	22.6	*22.0*	2.8	.....	1.1	540
Flank, very lean:									
Edible portion—									
Minimum	3	.....	69.6	22.7	*21.2*	.7	.....	.9	520
Maximum	3	.....	72.1	28.5	*27.4*	8.3	.....	1.3	770
Average	**3**	.....	**70.7**	**25.9**	*24.8*	**3.3**	.....	**1.2**	**620**
As purchased—									
Minimum	3	.7	67.1	22.5	*21.0*	.7	.....	.9	485
Maximum	3	6.9	69.2	27.7	*26.6*	8.2	.....	1.2	765
Average	**3**	**3.5**	**68.2**	**24.9**	*23.9*	**3.3**	.....	**1.1**	**605**
Flank, lean:									
Edible portion—									
Minimum	3	.....	66.0	20.4	*19.4*	7.8	.....	.9	710
Maximum	3	.....	70.8	21.4	*20.4*	13.7	.....	1.0	960
Average	**3**	.....	**67.8**	**20.8**	*19.9*	**11.3**	.....	**1.0**	**865**
As purchased—									
Minimum	3	.....	64.5	20.1	*19.0*	7.8	.....	1.0	710
Maximum	3	2.3	70.8	21.0	*20.4*	13.2	.....	1.0	930
Average	**3**	**1.4**	**66.9**	**20.5**	*19.7*	**11.0**	.....	**1.0**	**845**
Flank, medium fat:									
Edible portion—									
Minimum	5	.....	57.4	18.4	*17.4*	18.7	.....	.8	1,145
Maximum	5	.....	62.2	19.5	*18.2*	24.3	.....	.9	1,370
Average	**5**	.....	**60.2**	**18.9**	*17.9*	**21.0**	.....	**.9**	**1,240**
As purchased—									
Minimum	5	1.1	39.8	11.9	*11.6*	12.2	.....	.6	735
Maximum	5	35.8	61.4	19.3	*18.0*	24.0	.....	.9	1,350
Average	**5**	**10.2**	**54.0**	**17.0**	*16.1*	**19.0**	.....	**.7**	**1,115**
Flank, fat:									
Edible portion—									
Minimum	3	.....	53.5	16.1	*15.4*	27.2	.....	.8	1,470
Maximum	3	.....	54.9	17.8	*17.4*	30.3	.....	.8	1,580
Average	**3**	.....	**54.2**	**17.1**	*16.6*	**28.4**	.....	**.8**	**1,515**
As purchased—									
Minimum	3	.....	49.1	14.8	*14.2*	26.7	.....	.7	1,445
Maximum	3	8.3	54.2	17.0	*17.4*	27.7	.....	.8	1,495
Average	**3**	**3.3**	**52.4**	**16.5**	*16.2*	**27.3**	.....	**.8**	**1,460**
Flank, very fat:									
Edible portion—									
Minimum	2	.....	27.4	12.5	*12.0*	43.8	.....	.7	2,135
Maximum	2	.....	41.9	15.5	*13.6*	59.9	.....	.7	2,760
Average	**2**	.....	**34.7**	**14.0**	*12.8*	**51.8**	.....	**.7**	**2,445**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, FRESH—continued.									
Flank, very fat—Continued.									
As purchased—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	0.4	24.3	11.0	*10.6*	43.6	.....	0.6	2,125
Maximum	2	11.5	41.8	15.4	*13.5*	53.0	.....	.7	2,440
Average	**2**	**6.0**	**33.0**	**13.2**	*12.0*	**48.3**	.....	**.7**	**2,275**
Flank, all analyses:									
Edible portion	16	.....	59.3	19.6	*18.7*	21.1	.....	.9	1,255
As purchased	16	5.5	56.1	18.6	*17.7*	19.9	.....	.8	1,185
Loin, very lean:									
Edible portion—									
Minimum	3	.....	70.1	19.5	*18.7*	1.1	.....	1.0	545
Maximum	3	.....	71.3	27.4	*27.4*	9.0	.....	1.4	745
Average	**3**	.....	**70.8**	**24.6**	*24.2*	**3.7**	.....	**1.3**	**615**
As purchased—									
Minimum	3	19.7	49.9	15.5	*14.9*	.8	.....	.7	395
Maximum	**3**	28.8	57.1	21.5	*21.2*	7.2	.....	1.1	590
Average	**3**	**23.0**	**54.6**	**18.8**	*18.5*	**3.0**	.....	**.9**	**475**
Loin, lean:									
Edible portion—									
Minimum	12	.....	64.6	13.4	*13.1*	11.4	.....	.7	735
Maximum	12	.....	74.7	24.2	*23.1*	15.0	.....	1.1	1,000
Average	**12**	.....	**67.0**	**19.7**	*19.3*	**12.7**	.....	**1.0**	**900**
As purchased—									
Minimum	11	6.7	52.1	11.9	*11.6*	10.0	.....	.6	650
Maximum	11	21.0	66.2	20.8	*19.8*	13.0	.....	1.0	865
Average	**11**	**13.1**	**58.2**	**17.1**	*16.7*	**11.1**	.....	**.9**	**785**
Loin, medium fat:									
Edible portion—									
Minimum	32	.....	56.5	10.6	*10.6*	16.1	.....	.5	1,040
Maximum	32	.....	68.3	22.0	*22.0*	23.7	.....	2.2	1,355
Average	**32**	.....	**60.6**	**18.5**	*18.2*	**20.2**	.....	**1.0**	**1,190**
As purchased—									
Minimum	32	4.1	44.4	8.5	*8.5*	13.7	.....	.4	860
Maximum	32	25.8	58.1	19.3	*19.1*	22.7	.....	1.9	1,300
Average	**32**	**13.3**	**52.5**	**16.1**	*15.8*	**17.5**	.....	**.9**	**1,040**
Loin, fat:									
Edible portion—									
Minimum	6	.....	52.1	16.0	*15.8*	25.1	.....	.8	1,380
Maximum	6	.....	56.9	18.7	*17.8*	29.6	.....	1.0	1,575
Average	**6**	.....	**54.7**	**17.5**	*16.8*	**27.6**	.....	**.9**	**1,490**
As purchased—									
Minimum	6	5.9	44.3	14.1	*13.8*	23.6	.....	.7	1,295
Maximum	6	15.0	53.6	16.5	*16.1*	25.9	.....	.9	1,400
Average	**6**	**10.2**	**49.2**	**15.7**	*15.0*	**24.8**	.....	**.8**	**1,305**
Loin, very fat:									
Edible portion—									
Minimum	3	.....	46.8	17.2	*16.3*	31.5	.....	.8	1,650
Maximum	3	.....	51.3	18.9	*18.5*	33.8	.....	.9	1,780
Average	**3**	.....	**49.7**	**17.8**	*17.1*	**32.3**	.....	**.9**	**1,695**
As purchased—									
Minimum	3	3.6	40.4	15.1	*14.4*	27.8	.....	.7	1,455
Maximum	3	13.7	49.2	16.6	*16.0*	30.4	.....	.9	1,590
Average	**3**	**9.7**	**44.9**	**16.0**	*15.5*	**29.1**	.....	**.8**	**1,525**
Loin, all analyses:									
Edible portion	56	.....	61.3	19.0	*18.6*	19.1	.....	1.0	1,155
As purchased	55	13.3	52.9	16.4	*16.0*	16.9	.....	.9	1,020
Loin, boneless strip, as purchased: *a*									
Minimum	6	.....	50.9	16.9	*16.0*	4.0	.....	.7	515
Maximum	6	.....	77.2	25.0	*22.7*	32.4	.....	1.2	1,680
Average	**6**	.....	**66.3**	**17.8**	*16.2*	**16.7**	.....	**.8**	**1,035**
Loin, sirloin butt, as purchased: *a*									
Minimum	6	.....	51.6	17.4	*16.6*	6.4	.....	.8	665
Maximum	6	.....	72.1	22.0	*20.5*	23.5	.....	1.1	1,630
Average	**6**	.....	**62.5**	**19.7**	*18.9*	**17.7**	.....	**.9**	**1,115**
Loin, porterhouse steak: *a*									
Edible portion	7	.....	60.0	21.9	*18.6*	20.4	.....	1.0	1,270
As purchased	7	12.7	52.4	19.1	*16.2*	17.9	.....	.8	1,110
Loin, sirloin steak: *a*									
Edible portion	21	.....	61.9	18.9	*18.6*	18.5	.....	1.0	1,130
As purchased	21	12.8	54.0	16.5	*16.2*	16.1	.....	.9	985

a All loin parts are included under analyses of "loin."

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, FRESH—continued.									
Loin, top of sirloin: *a*		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Edible portion	1	.....	42.2	13.8	*13.3*	43.7	.....	0.8	2,100
As purchased	1	3.2	40.9	13.3	*12.9*	42.3	.....	.7	2,030
Loin, tenderloin, as purchased: *a*									
Minimum	6	.....	53.5	12.2	*11.3*	17.2	.....	.6	1,065
Maximum	6	.....	66.5	18.3	*17.6*	29.9	.....	1.0	1,550
Average	**6**	.....	**59.2**	**16.2**	*15.6*	**24.4**	.....	**.8**	**1,330**
Loin trimmings: *a*									
Edible portion	6	.....	55.0	16.9	*16.2*	28.0	.....	.8	1,495
As purchased	6	48.8	27.9	8.5	*8.2*	14.7	.....	.4	780
Loin, free from all visible fat	2	.....	74.0	22.1	*21.7*	3.1	.....	1.2	540
Navel, very lean:									
Edible portion	1	.....	68.6	30.7	*29.4*	.6	.....	1.4	595
As purchased	1	2.9	66.6	29.8	*28.5*	.6	.....	1.4	580
Navel, medium fat:									
Edible portion	1	.....	47.6	15.6	*15.1*	36.5	.....	.8	1,830
As purchased	1	11.4	42.2	13.8	*13.4*	32.3	.....	.7	1,620
Neck, very lean:									
Edible portion—									
Minimum	3	.....	71.8	21.0	*20.8*	.7	.....	1.0	460
Maximum	3	.....	74.0	23.4	*24.3*	4.9	.....	1.2	640
Average	**3**	.....	**73.2**	**22.5**	*22.5*	**3.2**	.....	**1.1**	**555**
As purchased—									
Minimum	3	22.5	18.3	6.2	*6.0*	.2	.....	.3	125
Maximum	3	75.2	57.4	16.2	*16.2*	3.2	.....	.8	430
Average	**3**	**44.3**	**40.7**	**12.5**	*12.2*	**2.2**	.....	**.6**	**325**
Neck, lean:									
Edible portion—									
Minimum	2	.....	69.3	21.3	*20.0*	8.0	.....	1.0	735
Maximum	2	.....	71.0	21.4	*20.9*	8.7	.....	1.1	765
Average	**2**	.....	**70.1**	**21.4**	*20.5*	**8.4**	.....	**1.0**	**750**
As purchased—									
Minimum	2	29.0	48.5	15.0	*14.2*	5.7	.....	.7	520
Maximum	2	30.0	50.4	15.1	*14.6*	6.1	.....	.8	535
Average	**2**	**29.5**	**49.5**	**15.1**	*14.4*	**5.9**	.....	**.7**	**530**
Neck, medium fat:									
Edible portion—									
Minimum	10	.....	60.5	18.9	*18.4*	11.5	.....	.8	870
Maximum	10	.....	67.8	22.0	*20.4*	19.8	.....	1.1	1,195
Average	**10**	.....	**63.4**	**20.1**	*19.2*	**16.5**	.....	**.9**	**1,070**
As purchased—									
Minimum	10	19.5	37.8	13.0	*12.4*	8.6	.....	.5	635
Maximum	10	37.5	50.8	17.2	*16.0*	15.4	.....	.8	930
Average	**10**	**27.6**	**45.9**	**14.5**	*13.9*	**11.9**	.....	**.7**	**770**
Neck, all analyses:									
Edible portion	15	.....	66.3	20.7	*20.0*	12.7	.....	1.0	920
As purchased	15	31.2	45.3	14.2	*13.6*	9.2	.....	.7	650
Plate, very lean:									
Edible portion—									
Minimum	3	.....	67.0	19.5	*18.8*	.6	.....	.9	540
Maximum	3	.....	71.5	27.6	*26.6*	11.9	.....	1.3	865
Average	**3**	.....	**69.1**	**22.8**	*22.1*	**7.7**	.....	**1.1**	**750**
As purchased—									
Minimum	3	18.3	25.5	9.8	*9.5*	.2	.....	.5	190
Maximum	3	64.3	56.1	17.3	*16.1*	8.7	.....	.8	689
Average	**3**	**37.4**	**43.0**	**13.6**	*13.2*	**5.7**	.....	**.7**	**495**
Plate, lean:									
Edible portion—									
Minimum	3	.....	60.8	8.9	*8.6*	16.5	.....	.4	860
Maximum	3	.....	74.5	19.1	*17.8*	20.8	.....	.9	1,230
Average	**3**	.....	**65.9**	**15.6**	*14.6*	**18.8**	.....	**.7**	**1,085**
As purchased—									
Minimum	3	15.7	51.3	7.2	*6.9*	13.2	.....	.3	690
Maximum	3	19.8	59.8	16.0	*14.9*	17.5	.....	.7	1,035
Average	**3**	**17.3**	**54.4**	**13.0**	*12.2*	**15.5**	.....	**.6**	**895**
Plate, medium fat:									
Edible portion—									
Minimum	7	.....	48.7	14.8	*14.7*	23.2	.....	.7	1,280
Maximum	7	.....	59.9	18.0	*16.7*	35.6	.....	.9	1,780
Average	**7**	.....	**54.4**	**16.5**	*15.7*	**29.1**	.....	**.8**	**1,535**

a All loin parts are included under analyses of "loin."

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, FRESH—continued.									
Plate, medium fat—Continued.									
As purchased—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	7	13.1	42.2	12.3	*12.2*	17.6	.....	0.6	970
Maximum	7	24.2	49.0	14.8	*14.1*	30.9	.....	.8	1,500
Average	**7**	**16.5**	**45.3**	**13.8**	*13.1*	**24.4**	.....	**.7**	**1,285**
Plate, fat:									
Edible portion—									
Minimum	3	.....	44.4	13.2	*12.4*	38.0	.....	.7	1,885
Maximum	3	.....	46.3	15.2	*15.4*	41.9	.....	.8	2,015
Average	**3**	.....	**45.2**	**14.6**	*14.2*	**39.8**	.....	**.8**	**1,950**
As purchased—									
Minimum	3	15.0	36.4	11.2	*10.6*	32.3	.....	.5	1,595
Maximum	3	17.9	39.2	12.4	*12.6*	35.6	.....	.7	1,710
Average	**3**	**16.0**	**38.0**	**12.2**	*11.9*	**33.5**	.....	**.6**	**1,640**
Plate, very fat:									
Edible portion	1	.....	34.6	10.6	*9.8*	55.1	.....	.5	2,520
As purchased	1	9.0	31.4	9.7	*8.9*	50.2	.....	.5	2,300
Plate, all analyses:									
Edible portion	17	.....	56.3	16.8	*16.0*	26.9	.....	.8	1,450
As purchased	17	19.8	44.4	13.1	*12.5*	22.7	.....	.6	1,200
Ribs, very lean:									
Edible portion—									
Minimum	4	.....	65.7	21.9	*21.1*	1.1	.....	.7	455
Maximum	4	.....	76.3	28.3	*27.4*	5.6	.....	1.6	755
Average	**4**	.....	**70.9**	**25.0**	*24.4*	**3.5**	.....	**1.2**	**615**
As purchased—									
Minimum	4	16.5	52.1	16.2	*14.7*	.7	.....	.5	310
Maximum	4	31.7	57.8	23.3	*22.8*	4.4	.....	1.3	615
Average	**4**	**23.3**	**54.2**	**19.4**	*18.9*	**2.7**	.....	**.9**	**475**
Ribs, lean:									
Edible portion—									
Minimum	6	.....	66.0	16.5	*16.9*	9.8	.....	.8	790
Maximum	6	.....	69.5	20.9	*20.8*	14.0	.....	1.1	955
Average	**6**	.....	**67.9**	**19.6**	*19.1*	**12.0**	.....	**1.0**	**870**
As purchased—									
Minimum	6	12.8	46.7	12.1	*12.4*	6.8	.....	.6	555
Maximum	6	32.6	60.7	17.5	*17.1*	11.0	.....	.9	750
Average	**6**	**22.6**	**52.6**	**15.2**	*14.8*	**9.3**	.....	**.7**	**675**
Ribs, medium fat:									
Edible portion—									
Minimum	15	.....	49.9	16.2	*15.9*	18.0	.....	.7	1,110
Maximum	15	.....	63.0	18.8	*18.1*	32.9	.....	1.1	1,700
Average	**15**	.....	**55.5**	**17.5**	*17.0*	**26.6**	.....	**.9**	**1,450**
As purchased—									
Minimum	15	15.3	40.2	12.2	*12.0*	12.8	.....	.4	1,790
Maximum	15	28.7	49.9	14.9	*14.6*	26.5	.....	.9	1,370
Average	**15**	**20.8**	**43.8**	**13.9**	*13.5*	**21.2**	.....	**.7**	**1,155**
Ribs, fat:									
Edible portion—									
Minimum	9	.....	47.4	12.0	*13.3*	33.9	.....	.6	1,710
Maximum	9	.....	51.7	16.8	*16.5*	36.8	.....	.9	1,845
Average	**9**	.....	**48.5**	**15.0**	*15.2*	**35.6**	.....	**.7**	**1,780**
As purchased—									
Minimum	8	14.3	34.3	11.4	*10.4*	26.8	.....	.5	1,325
Maximum	8	22.0	47.8	16.0	*15.6*	39.9	.....	.7	1,790
Average	**8**	**16.8**	**39.6**	**12.7**	*12.4*	**30.6**	.....	**.6**	**1,525**
Ribs, very fat:									
Edible portion	1	.....	45.9	14.6	*14.8*	38.7	.....	.6	1,905
As purchased	1	6.4	42.9	13.7	*13.9*	36.2	.....	.6	1,780
Ribs, all analyses:									
Edible portion	35	.....	57.0	17.8	*17.5*	24.6	.....	.9	1,370
As purchased	34	20.1	45.3	14.4	*13.9*	20.0	.....	.7	1,110
Rib rolls, very lean, as purchased:									
Minimum	2	.....	73.3	19.6	*19.6*	4.6	.....	1.0	595
Maximum	2	.....	74.0	22.0	*21.1*	5.4	.....	1.0	605
Average	**2**	.....	**73.7**	**20.8**	*20.3*	**5.0**	.....	**1.0**	**600**
Rib rolls, lean, as purchased:									
Minimum	3	.....	67.3	19.3	*18.5*	8.4	.....	.9	740
Maximum	3	.....	70.5	20.8	*20.1*	13.3	.....	1.0	920
Average	**3**	.....	**69.0**	**20.2**	*19.5*	**10.5**	.....	**1.0**	**820**
Rib rolls, medium fat, as purchased:									
Minimum	4	.....	60.7	18.5	*18.0*	15.3	.....	.9	1,010
Maximum	4	.....	65.6	20.1	*19.1*	20.4	.....	.9	1,205
Average	**4**	.....	**63.9**	**19.3**	*18.5*	**16.7**	.....	**.9**	**1,065**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, FRESH—continued.									
Rib rolls, fat, as purchased:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	50.5	16.4	*16.3*	30.5	.....	0.8	1,590
Maximum	2	.....	52.4	18.0	*16.6*	32.1	.....	.8	1,690
Average	**2**	.....	**51.5**	**17.2**	*16.4*	**31.3**	.....	**.8**	**1,640**
Rib rolls, all analyses, as purchased	11	.....	64.8	19.4	*18.8*	15.5	.....	.9	1,015
Rib trimmings, all analyses:									
Edible portion—									
Minimum	11	.....	33.9	11.2	*10.7*	6.5	.....	.5	690
Maximum	11	.....	71.6	22.4	*20.9*	54.9	.....	1.0	2,525
Average	**11**	.....	**54.7**	**16.9**	*16.1*	**28.4**	.....	**.8**	**1,515**
As purchased—									
Minimum	11	20.9	26.8	8.6	*8.4*	3.7	.....	.4	395
Maximum	11	44.8	49.2	13.0	*12.6*	43.5	.....	.6	2,000
Average	**11**	**34.1**	**35.7**	**11.0**	*10.5*	**19.2**	.....	**.5**	**1,015**
Ribs, cross, very lean:									
Edible portion	1	.....	65.8	18.0	*18.4*	14.9	.....	.9	965
As purchased	1	12.8	57.4	15.6	*16.1*	13.0	.....	.7	840
Ribs, cross, medium fat:									
Edible portion	1	.....	43.9	13.8	*13.7*	41.6	.....	.8	2,010
As purchased	1	12.2	38.6	12.1	*12.0*	36.5	.....	.7	1,765
Ribs, cross, all analyses:									
Edible portion	2	.....	54.9	15.9	*16.1*	28.2	.....	.8	1,485
As purchased	2	12.5	48.0	13.8	*14.0*	24.8	.....	.7	1,305
Round, very lean:									
Edible portion—									
Minimum	6	.....	72.2	21.1	*21.1*	1.1	.....	1.0	450
Maximum	6	.....	75.4	24.6	*24.4*	4.5	.....	1.9	605
Average	**6**	.....	**73.6**	**22.6**	*22.3*	**2.8**	.....	**1.3**	**540**
As purchased—									
Minimum	6	3.4	61.5	18.4	*18.3*	.9	.....	1.0	425
Maximum	6	17.4	72.8	21.0	*21.4*	3.7	.....	1.8	530
Average	**6**	**10.6**	**65.9**	**20.2**	*19.9*	**2.4**	.....	**1.2**	**475**
Round, lean:									
Edible portion—									
Minimum	31	.....	65.8	18.8	*19.0*	5.1	.....	.3	585
Maximum	31	.....	73.6	24.1	*23.8*	10.0	.....	1.3	835
Average	**31**	.....	**70.0**	**21.3**	*21.0*	**7.9**	.....	**1.1**	**730**
As purchased—									
Minimum	29	2.8	57.2	17.4	*16.9*	4.6	.....	.3	565
Maximum	29	17.3	68.8	22.9	*22.6*	9.4	.....	1.2	795
Average	**29**	**8.1**	**64.4**	**19.5**	*19.2*	**7.3**	.....	**1.0**	**670**
Round, medium fat:									
Edible portion—									
Minimum	18	.....	61.9	18.6	*18.6*	10.6	.....	.9	835
Maximum	18	.....	68.4	22.4	*21.6*	17.8	.....	1.2	1,095
Average	**18**	.....	**65.5**	**20.3**	*19.8*	**13.6**	.....	**1.1**	**950**
As purchased—									
Minimum	14	1.2	57.2	17.4	*16.8*	10.1	.....	.8	790
Maximum	14	11.2	65.9	21.6	*20.8*	16.6	.....	1.2	1,070
Average	**14**	**7.2**	**60.7**	**19.0**	*18.3*	**12.8**	.....	**1.0**	**895**
Round, fat:									
Edible portion—									
Minimum	5	.....	57.8	18.3	*17.9*	16.7	.....	.9	1,050
Maximum	5	.....	64.5	21.4	*20.9*	22.3	.....	1.0	1,305
Average	**5**	.....	**60.4**	**19.5**	*19.1*	**19.5**	.....	**1.0**	**1,185**
As purchased—									
Minimum	3	6.0	47.8	16.7	*16.1*	14.7	.....	.8	940
Maximum	3	20.0	58.0	18.8	*18.5*	18.5	.....	.9	1,130
Average	**3**	**12.0**	**54.0**	**17.5**	*17.1*	**16.1**	.....	**.8**	**1,005**
Round, very fat:									
Edible portion—									
Minimum	2	.....	54.9	17.2	*16.7*	24.7	.....	.7	1,400
Maximum	2	.....	56.8	19.1	*17.6*	27.7	.....	.9	1,490
Average	**2**	.....	**55.9**	**18.2**	*17.1*	**26.2**	.....	**.8**	**1,445**
As purchased—									
Minimum	2	6.4	45.9	14.4	*13.9*	23.1	.....	.6	1,245
Maximum	2	16.4	53.2	17.8	*16.5*	23.2	.....	.8	1,305
Average	**2**	**11.4**	**49.6**	**16.1**	*15.2*	**23.1**	.....	**.7**	**1,275**
Round, all analyses:									
Edible portion	62	.....	67.8	20.9	*20.5*	10.6	.....	1.1	835
As purchased	54	8.5	62.5	19.2	*18.8*	9.2	.....	1.0	745
Round, free from all visible fat	4	.....	73.5	23.2	*22.8*	2.5	.....	1.2	535

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, FRESH—continued.									
Round, second cut:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	69.5	20.1	*20.4*	8.6	.....	1.0	735
Maximum	2	.....	70.0	20.7	*20.6*	8.6	.....	1.3	745
Average	2	.....	**69.8**	**20.4**	*20.5*	**8.6**	.....	**1.1**	**740**
As purchased—									
Minimum	2	6.9	47.2	14.1	*14.0*	5.8	.....	.9	505
Maximum	2	32.1	65.2	18.7	*19.0*	8.0	.....	.9	685
Average	2	**19.5**	**56.2**	**16.4**	*16.5*	**6.9**	.....	**.9**	**595**
Rump, very lean:									
Edible portion—									
Minimum	4	.....	68.8	21.7	*21.2*	.7	.....	1.1	520
Maximum	4	.....	74.2	26.5	*25.9*	8.9	.....	1.4	780
Average	4	.....	**71.2**	**23.0**	*22.5*	**5.1**	.....	**1.2**	**645**
As purchased—									
Minimum	4	1.5	51.4	18.0	*17.8*	.5	.....	1.0	375
Maximum	4	28.6	67.8	21.5	*20.9*	8.7	.....	1.1	765
Average	4	**14.3**	**60.9**	**19.5**	*19.1*	**4.6**	.....	**1.1**	**555**
Rump, lean:									
Edible portion—									
Minimum	4	.....	62.1	17.5	*17.7*	10.0	.....	.9	840
Maximum	4	.....	68.3	22.7	*21.5*	17.7	.....	1.1	1,170
Average	4	.....	**65.7**	**20.9**	*19.6*	**13.7**	.....	**1.0**	**965**
As purchased—									
Minimum	3	1.5	46.8	14.5	*13.8*	7.2	.....	.7	575
Maximum	3	31.5	66.4	22.0	*21.2*	16.1	.....	1.1	1,065
Average	3	**14.0**	**56.6**	**19.1**	*17.5*	**11.0**	.....	**.9**	**820**
Rump, medium fat:									
Edible portion—									
Minimum	10	.....	52.4	16.0	*15.8*	20.3	.....	.8	1,195
Maximum	10	.....	60.3	19.5	*18.1*	29.9	.....	1.0	1,575
Average	10	.....	**56.7**	**17.4**	*16.9*	**25.5**	.....	**.9**	**1,400**
As purchased—									
Minimum	10	6.6	39.9	11.8	*11.5*	15.3	.....	.6	920
Maximum	10	27.8	52.8	15.8	*25.0*	25.0	.....	.9	1,305
Average	10	**20.7**	**45.0**	**13.8**	*13.4*	**20.2**	.....	**.7**	**1,110**
Rump, fat:									
Edible portion—									
Minimum	5	.....	43.1	14.7	*14.5*	33.3	.....	.7	1,710
Maximum	5	.....	49.9	22.7	*22.4*	39.4	.....	1.2	1,960
Average	5	.....	**47.1**	**16.8**	*16.4*	**35.7**	.....	**.8**	**1,820**
As purchased—									
Minimum	5	17.9	33.5	10.7	*10.8*	23.1	.....	.5	1,175
Maximum	5	31.3	39.7	17.6	*17.4*	32.3	.....	.9	1,605
Average	5	**23.0**	**36.2**	**12.9**	*12.6*	**27.6**	.....	**.6**	**1,405**
Rump, very fat:									
Edible portion	1	.....	40.2	15.0	*14.7*	44.3	.....	.8	2,150
As purchased	1	16.2	33.7	12.6	*12.3*	37.2	.....	.6	1,805
Rump, all analyses:									
Edible portion	24	.....	57.9	18.7	*18.1*	23.1	.....	.9	1,325
As purchased	23	19.0	46.9	15.2	*14.7*	18.6	.....	.8	1,065
Rump, free from all visible fat	1	.....	73.9	21.2	*21.2*	3.8	.....	1.1	555
Shank, fore, very lean:									
Edible portion—									
Minimum	4	.....	73.5	21.3	*20.8*	1.5	.....	1.0	480
Maximum	4	.....	75.9	22.9	*22.7*	4.0	.....	1.2	565
Average	4	.....	**74.4**	**22.1**	*21.7*	**2.8**	.....	**1.1**	**530**
As purchased—									
Minimum	4	35.9	36.5	10.5	*10.6*	.8	.....	.5	240
Maximum	4	50.4	47.9	13.9	*13.6*	2.3	.....	.7	355
Average	4	**44.1**	**41.6**	**12.3**	*12.1*	**1.6**	.....	**.6**	**295**
Shank, fore, lean:									
Edible portion—									
Minimum	5	.....	69.9	20.9	*20.1*	5.3	.....	.9	615
Maximum	5	.....	73.2	24.4	*23.3*	7.9	.....	1.1	735
Average	5	.....	**71.5**	**22.0**	*21.4*	**6.1**	.....	**1.0**	**665**
As purchased—									
Minimum	5	25.6	36.4	11.5	*11.7*	3.3	.....	.4	360
Maximum	5	48.0	52.3	18.1	*17.4*	5.2	.....	.8	500
Average	5	**36.5**	**45.4**	**14.0**	*13.6*	**3.9**	.....	**.6**	**425**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, FRESH—continued.									
Shank, fore, medium fat:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	5	.....	65.5	19.9	*19.2*	9.9	.....	0.9	806
Maximum	5	.....	70.0	21.0	*20.2*	14.2	.....	1.0	970
Average	**5**	.....	**67.9**	**20.4**	*19.6*	**11.6**	.....	**.9**	**870**
As purchased—									
Minimum	5	33.0	39.3	11.9	*11.6*	6.1	.....	.6	495
Maximum	5	40.0	45.3	13.4	*13.1*	8.5	.....	.6	585
Average	**5**	**36.9**	**42.9**	**12.8**	*12.3*	**7.3**	.....	**.6**	**545**
Shank, fore, very fat:									
Edible portion	1	.....	59.0	20.1	*18.6*	21.6	.....	.8	1,285
As purchased	1	30.9	40.7	13.9	*12.9*	14.9	.....	.6	890
Shank, fore, all analyses:									
Edible portion	15	.....	70.3	21.4	*20.7*	8.1	.....	.9	740
As purchased	15	38.3	43.2	13.2	*12.7*	5.2	.....	.6	465
Shank, hind, very lean:									
Edible portion	1	.....	71.2	26.6	*25.8*	1.7	.....	1.3	565
As purchased	1	50.0	35.6	13.3	*12.9*	.8	.....	.7	280
Shank, hind, lean:									
Edible portion—									
Minimum	6	.....	71.3	20.8	*20.4*	4.3	.....	.9	590
Maximum	6	.....	73.6	23.1	*21.6*	7.3	.....	1.2	715
Average	**6**	.....	**72.5**	**21.9**	*21.1*	**5.4**	.....	**1.0**	**635**
As purchased—									
Minimum	6	50.0	22.8	6.6	*6.7*	1.7	.....	.3	205
Maximum	6	68.3	36.4	11.2	*10.7*	3.2	.....	.5	315
Average	**6**	**58.5**	**30.1**	**9.1**	*8.8*	**2.2**	.....	**.4**	**260**
Shank, hind, medium fat:									
Edible portion—									
Minimum	6	.....	65.3	19.0	*18.5*	9.6	.....	.8	800
Maximum	6	.....	69.5	21.8	*20.6*	15.4	.....	1.0	1,005
Average	**6**	.....	**67.8**	**20.9**	*19.8*	**11.5**	.....	**.9**	**875**
As purchased—									
Minimum	6	52.0	29.8	8.8	*8.6*	4.5	.....	.4	370
Maximum	6	56.0	33.1	10.1	*9.6*	7.1	.....	.4	460
Average	**6**	**53.9**	**31.3**	**9.6**	*9.1*	**5.3**	.....	**.4**	**405**
Shank, hind, fat:									
Edible portion	1	.....	61.4	20.4	*18.9*	18.8	.....	.9	1,170
As purchased	1	51.6	29.7	9.9	*9.2*	9.1	.....	.4	570
Shank, hind, all analyses:									
Edible portion	14	.....	69.6	21.7	*20.7*	8.7	.....	1.0	770
As purchased	14	55.4	31.0	9.7	*9.3*	3.9	.....	.4	345
Shoulder and clod, very lean: *a*									
Edible portion—									
Minimum	4	.....	75.1	20.8	*20.4*	.8	.....	1.1	420
Maximum	4	.....	77.7	21.6	*22.4*	1.5	.....	1.2	460
Average	**4**	.....	**76.1**	**21.3**	*21.5*	**1.3**	.....	**1.1**	**450**
As purchased—									
Minimum	4	12.5	46.1	12.8	*12.5*	.6	.....	.7	275
Maximum	4	39.8	65.8	18.8	*19.6*	1.2	.....	1.0	395
Average	**4**	**23.3**	**58.3**	**16.3**	*16.5*	**1.0**	.....	**.9**	**345**
Shoulder and clod, lean:									
Edible portion—									
Minimum	5	.....	71.4	19.2	*19.7*	4.7	.....	1.0	555
Maximum	5	.....	74.5	22.1	*21.9*	6.7	.....	1.1	680
Average	**5**	.....	**73.1**	**20.4**	*20.4*	**5.4**	.....	**1.1**	**605**
As purchased—									
Minimum	4	5.6	69.4	9.2	*9.3*	2.6	.....	.4	280
Maximum	4	53.4	34.3	19.3	*19.3*	6.1	.....	1.1	615
Average	**4**	**18.8**	**59.4**	**16.4**	*16.5*	**4.4**	.....	**.9**	**490**
Shoulder and clod, medium fat:									
Edible portion—									
Minimum	14	.....	64.0	17.4	*17.3*	7.1	.....	.8	625
Maximum	14	.....	74.5	20.7	*20.7*	16.4	.....	1.4	1,030
Average	**14**	.....	**68.3**	**19.6**	*19.3*	**11.3**	.....	**1.1**	**840**
As purchased—									
Minimum	12	7.0	50.7	14.5	*14.3*	5.6	.....	.7	520
Maximum	12	27.7	62.3	18.6	*18.4*	14.4	.....	1.1	925
Average	**12**	**16.4**	**56.8**	**16.4**	*16.1*	**9.8**	.....	**.9**	**720**

a The "clod" usually contains no refuse.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, FRESH—continued.									
Shoulder and clod, fat:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	5	.....	56.2	18.1	*17.1*	18.5	.....	0.9	1,120
Maximum	5	.....	62.1	21.9	*21.0*	21.6	.....	1.2	1,320
Average	**5**	.....	**60.4**	**19.5**	*18.8*	**19.8**	.....	**1.0**	**1,200**
As purchased—									
Minimum	3	11.0	49.9	17.7	*14.8*	16.5	.....	.8	1,025
Maximum	3	13.3	54.8	19.4	*18.6*	19.2	.....	1.0	1,170
Average	**3**	**11.9**	**52.8**	**17.7**	*16.7*	**17.7**	.....	**.9**	**1,075**
Shoulder and clod, all analyses:									
Edible portion	28	.....	68.9	20.0	*19.7*	10.3	.....	1.1	805
As purchased	23	17.4	57.0	16.5	*16.3*	8.4	.....	.9	660
Shoulder, free from all visible fat	1	.....	74.6	21.6	*21.5*	2.7	.....	1.2	515
Socket:									
Edible portion	1	.....	57.1	16.9	*16.7*	25.2	.....	1.0	1,380
As purchased	1	35.8	36.7	10.8	*10.7*	16.2	.....	.6	885
Forequarter, very lean:									
Edible portion—									
Minimum	2	.....	72.3	21.9	*20.8*	1.1	.....	.9	460
Maximum	2	.....	76.0	22.3	*21.8*	6.0	.....	1.1	660
Average	**2**	.....	**74.1**	**22.1**	*21.3*	**3.6**	.....	**1.0**	**565**
As purchased—									
Minimum	2	23.2	47.5	14.0	*13.7*	.7	.....	.7	290
Maximum	2	37.4	55.5	16.8	*16.0*	4.6	.....	.7	505
Average	**2**	**30.3**	**51.5**	**15.4**	*14.8*	**2.7**	.....	**.7**	**400**
Forequarter, lean:									
Edible portion—									
Minimum	4	.....	67.5	16.5	*16.1*	11.4	.....	.7	815
Maximum	4	.....	71.1	20.0	*19.4*	12.7	.....	.9	910
Average	**4**	.....	**68.6**	**18.9**	*18.4*	**12.2**	.....	**.8**	**865**
As purchased—									
Minimum	4	19.7	52.1	12.4	*12.1*	8.7	.....	.5	615
Maximum	4	24.9	54.3	16.0	*15.3*	10.0	.....	.7	720
Average	**4**	**22.3**	**53.3**	**14.7**	*14.3*	**9.5**	.....	**.6**	**675**
Forequarter, medium fat:									
Edible portion—									
Minimum	10	.....	54.1	17.2	*15.9*	17.1	.....	.8	1,075
Maximum	10	.....	63.6	19.1	*18.4*	27.6	.....	1.0	1,485
Average	**10**	.....	**60.4**	**17.9**	*17.3*	**21.4**	.....	**.9**	**1,235**
As purchased—									
Minimum	10	16.8	44.1	13.7	*13.2*	13.6	.....	.6	855
Maximum	10	23.9	51.9	15.3	*14.6*	22.5	.....	.8	1,210
Average	**10**	**18.7**	**49.1**	**14.5**	*14.0*	**17.5**	.....	**.7**	**1,010**
Forequarter, fat:									
Edible portion	1	.....	53.5	15.9	*15.8*	30.0	.....	.7	1,560
As purchased	1	21.7	41.9	12.5	*12.4*	23.4	.....	.6	1,220
Forequarter, very fat:									
Edible portion	1	.....	44.6	15.0	*14.0*	40.7	.....	.7	1,995
As purchased	1	12.6	41.5	12.4	*13.6*	31.7	.....	.6	1,570
Forequarter, all analyses:									
Edible portion	18	.....	62.5	18.3	*17.7*	18.9	.....	.9	1,135
As purchased	18	20.6	49.5	14.4	*14.1*	15.1	.....	.7	905
Hind quarter, very lean:									
Edible portion—									
Minimum	2	.....	71.7	21.8	*20.8*	1.1	.....	1.1	535
Maximum	2	.....	72.4	26.3	*25.8*	5.8	.....	1.4	650
Average	**2**	.....	**72.0**	**24.0**	*23.3*	**3.5**	.....	**1.2**	**595**
As purchased—									
Minimum	2	18.8	55.1	17.8	*16.9*	.8	.....	.8	410
Maximum	2	23.2	58.7	20.1	*19.9*	4.8	.....	1.0	535
Average	**2**	**21.0**	**56.9**	**19.0**	*18.4*	**2.8**	.....	**.9**	**470**
Hind quarter, lean:									
Edible portion—									
Minimum	4	.....	64.6	19.3	*18.8*	12.2	.....	1.0	890
Maximum	4	.....	67.5	20.6	*19.5*	14.9	.....	1.0	990
Average	**4**	.....	**66.3**	**20.0**	*19.3*	**13.4**	.....	**1.0**	**935**
As purchased—									
Minimum	4	16.2	53.8	16.0	*15.6*	10.2	.....	.8	750
Maximum	4	17.0	56.5	17.3	*16.3*	12.4	.....	.9	820
Average	**4**	**16.6**	**55.3**	**16.7**	*16.1*	**11.2**	.....	**.8**	**785**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, FRESH—continued.									
Hind quarter, medium fat:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	11	.....	55.7	17.2	*15.9*	16.8	.....	0.8	1,070
Maximum	11	.....	63.9	19.5	*18.7*	26.6	.....	1.0	1,430
Average	**11**	.....	**59.8**	**18.3**	*17.7*	**21.6**	.....	**.9**	**1,250**
As purchased—									
Minimum	11	13.8	44.4	13.7	*13.6*	14.3	.....	.6	910
Maximum	11	20.2	54.3	16.5	*15.8*	22.6	.....	.8	1,205
Average	**11**	**15.7**	**50.4**	**15.4**	*14.9*	**18.3**	.....	**.7**	**1,060**
Hind quarter, fat:									
Edible portion	1	.....	52.1	17.7	*16.4*	30.7	.....	.8	1,625
As purchased	1	12.4	45.6	15.5	*14.4*	26.9	.....	.7	1,425
Hind quarter, all analyses:									
Edible portion	18	.....	62.2	19.3	*18.6*	18.3	.....	.9	1,130
As purchased	18	16.3	52.0	16.1	*15.5*	15.4	.....	.8	950
Sides, very lean:									
Edible portion—									
Minimum	2	.....	72.4	21.8	*20.8*	1.1	.....	.9	500
Maximum	2	.....	73.8	24.3	*23.9*	5.9	.....	1.2	655
Average	**2**	.....	**73.1**	**23.0**	*22.3*	**3.5**	.....	**1.1**	**575**
As purchased—									
Minimum	2	21.2	51.1	16.9	*16.4*	.7	.....	.7	345
Maximum	2	30.7	57.0	17.2	*16.6*	4.7	.....	.9	520
Average	**2**	**26.0**	**54.0**	**17.0**	*16.5*	**2.7**	.....	**.8**	**430**
Sides, lean:									
Edible portion—									
Minimum	4	.....	66.5	17.6	*17.1*	12.3	.....	.8	905
Maximum	4	.....	67.5	20.3	*19.3*	14.8	.....	1.0	950
Average	**4**	.....	**67.2**	**19.3**	*18.7*	**13.2**	.....	**.9**	**915**
As purchased—									
Minimum	4	18.0	52.9	13.9	*13.6*	10.1	.....	.6	730
Maximum	4	20.8	55.3	16.5	*15.8*	11.7	.....	.8	755
Average	**4**	**19.5**	**54.1**	**15.5**	*15.1*	**10.6**	.....	**.7**	**735**
Sides, medium fat:									
Edible portion—									
Minimum	11	.....	54.8	17.2	*16.5*	15.7	.....	.8	1,020
Maximum	11	.....	64.9	19.3	*18.6*	27.1	.....	.9	1,465
Average	**11**	.....	**59.7**	**18.1**	*17.4*	**22.0**	.....	**.9**	**1,265**
As purchased—									
Minimum	11	15.5	44.2	13.9	*13.7*	12.7	.....	.7	830
Maximum	11	21.8	53.1	15.8	*15.1*	21.9	.....	.8	1,185
Average	**11**	**17.4**	**49.4**	**14.8**	*14.4*	**18.1**	.....	**.7**	**1,040**
Sides, very fat:									
Edible portion	1	.....	47.8	16.2	*15.1*	36.4	.....	.7	1,835
As purchased	1	13.2	41.5	14.0	*13.1*	31.6	.....	.6	1,595
Sides, all analyses:									
Edible portion	18	.....	62.2	18.8	*18.1*	18.8	.....	.9	1,145
As purchased	18	18.6	50.5	15.2	*14.7*	15.5	.....	.7	935
Miscellaneous cuts, free from all visible fat *a*	11	.....	73.8	22.4	*22.1*	2.9	.....	1.2	540
Clear fat	7	.....	13.4	4.1	*4.1*	82.1	.....	.4	3,540
Soup stock	1	.....	89.1	.....	*5.8*	1.5	.....	3.6	170
Brain, edible portion	1	.....	80.6	8.8	*9.0*	9.3	.....	1.1	555
Heart:									
Edible portion—									
Minimum	2	.....	56.5	15.7	*15.8*	14.6	.....	.9	920
Maximum	2	.....	68.7	16.3	*16.3*	26.2	.....	1.0	1,395
Average	**2**	.....	**62.6**	**16.0**	*16.0*	**20.4**	.....	**1.0**	**160**
As purchased	1	5.9	53.2	14.8	*15.3*	24.7	.....	.9	1,320
Kidney:									
Edible portion—									
Minimum	3	.....	75.7	15.8	*16.1*	2.4	.....	1.1	420
Maximum	3	.....	78.7	17.1	*17.6*	7.1	.....	1.3	595
Average	**3**	.....	**76.7**	**16.6**	*16.9*	**4.8**	**.4**	**1.2**	**520**
As purchased	1	19.9	63.1	13.7	*14.1*	1.9	.....	1.0	335
Beef liver:									
Edible portion—									
Minimum	6	.....	69.5	18.1	*18.8*	3.3	1.0	1.3	520
Maximum	6	.....	75.0	23.1	*23.4*	5.7	3.5	2.5	670
Average	**6**	.....	**71.2**	**20.7**	*21.2*	**4.5**	**1.5**	**1.6**	**605**
As purchased	1	7.3	65.6	20.2	*20.2*	3.1	2.5	1.3	555

a Includes those given under "chuck," "round," "loin," etc.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, FRESH—continued.		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Lungs, as purchased	1	.....	79.7	16.4	*16.1*	3.2	.....	1.0	440
Marrow, as purchased	1	.....	3.3	2.2	*2.6*	92.8	.....	1.3	3,955
Sweetbreads, as purchased	1	.....	70.9	16.8	*15.4*	12.1	.....	1.6	825
Suet, as purchased:									
Minimum	9	.....	4.3	1.1	*1.0*	70.7	.....	.2	3,110
Maximum	9	.....	21.9	7.5	*7.2*	94.5	.....	.7	4,010
Average	**9**	.....	**13.7**	**4.7**	*4.2*	**81.8**	.....	**.3**	**3,540**
Tongue:									
Edible portion—									
Minimum	3	.....	63.5	17.0	*17.4*	.8	.....	.9	445
Maximum	3	.....	76.2	22.2	*21.9*	18.0	.....	1.1	1,075
Average	**3**	.....	**70.8**	**18.9**	*19.0*	**9.2**	.....	**1.0**	**740**
As purchased—									
Minimum	3	9.2	32.4	7.8	*7.9*	.7	.....	.4	315
Maximum	3	55.3	69.2	20.2	*19.9*	15.3	.....	1.0	915
Average	**3**	**26.5**	**51.8**	**14.1**	*14.2*	**6.7**	.....	**.8**	**545**
BEEF, COOKED.									
Cut not given, boiled, as purchased	1	.....	38.1	26.2	*26.1*	34.9	.....	.9	2,805
Scraps, as purchased:									
Minimum	2	.....	4.5	16.3	*19.0*	27.7	.....	.7	1,660
Maximum	2	.....	41.9	26.4	*24.2*	75.8	.....	6.2	3,500
Average	**2**	.....	**23.2**	**21.4**	*21.6*	**51.7**	.....	**3.5**	**2,580**
Roast, as purchased:									
Minimum	7	.....	38.7	15.1	*14.5*	19.6	.....	.7	1,210
Maximum	7	.....	59.5	29.0	*29.7*	41.4	.....	2.7	2,030
Average	**7**	.....	**48.2**	**22.3**	*21.9*	**28.6**	.....	**1.3**	**1,620**
Pressed, as purchased	1	.....	**44.1**	23.6	*26.7*	27.7	.....	1.5	1,610
Round steak, fat removed, as purchased:									
Minimum	18	.....	53.5	19.4	*20.3*	3.3	.....	1.1	615
Maximum	18	.....	72.3	34.1	*34.1*	16.9	.....	3.1	1,170
Average	**18**	.....	**63.0**	**27.6**	*27.5*	**7.7**	.....	**1.8**	**840**
Sirloin steak, baked, as purchased	1	.....	63.7	23.9	*24.7*	10.2	.....	1.4	875
Loin steak, tenderloin, broiled, edible portion:									
Minimum	6	.....	42.7	19.8	*20.6*	11.8	.....	1.0	925
Maximum	6	.....	64.5	26.7	*26.6*	35.7	.....	1.4	1,875
Average	**6**	.....	**54.8**	**23.5**	*23.6*	**20.4**	.....	**1.2**	**1,300**
Sandwich meat, as purchased:									
Minimum	3	.....	56.3	27.1	*27.2*	8.0	.....	2.5	870
Maximum	3	.....	61.2	28.6	*28.8*	13.6	.....	3.1	1,075
Average	**3**	.....	**58.3**	**28.0**	*27.9*	**11.0**	.....	**2.8**	**985**
BEEF, CANNED.									
Boiled beef, as purchased	1	.....	51.8	25.5	*24.4*	22.5	.....	1.3	1,425
Cheek, ox, as purchased	1	.....	66.1	22.2	*22.3*	8.4	.....	3.2	765
Chili-con-carne, as purchased	1	.....	75.4	13.3	*13.3*	4.6	4.0	2.7	515
Collops, minced, as purchased	1	.....	72.3	17.8	*17.9*	6.8	1.1	1.9	640
Corned beef:									
Minimum	15	.....	43.2	20.7	*19.6*	11.7	.....	2.0	1,000
Maximum	15	.....	58.3	35.1	*34.2*	31.1	.....	7.3	1,695
Average	**15**	.....	**51.8**	**26.3**	*25.5*	**18.7**	.....	**4.0**	**1,280**
Dried beef, as purchased:									
Minimum	2	.....	44.2	38.0	*37.1*	6.1	.....	9.8	955
Maximum	2	.....	45.3	40.4	*40.1*	4.8	.....	12.6	965
Average	**2**	.....	**44.8**	**39.2**	*38.6*	**5.4**	.....	**11.2**	**960**
Kidneys, stewed, as purchased:									
Minimum	2	.....	70.9	14.6	.....	4.9	.....	2.1	580
Maximum	2	.....	72.9	22.1	.....	5.4	4.3	2.8	620
Average	**2**	.....	**71.9**	**18.4**	.....	**5.1**	**2.1**	**2.5**	**600**
Luncheon beef, as purchased	1	.....	52.9	27.6	*26.4*	15.9	.....	4.8	1,185
Palates, ox, as purchased:									
Minimum	2	.....	69.6	16.4	*15.9*	9.4	.....	.4	750
Maximum	2	.....	73.1	19.3	*19.0*	10.6	.....	2.0	755
Average	**2**	.....	**71.4**	**17.8**	*17.4*	**10.0**	.....	**1.2**	**755**
Roast beef, as purchased:									
Minimum	4	.....	55.8	20.3	*19.3*	9.0	.....	1.2	935
Maximum	4	.....	62.8	29.8	*30.0*	23.6	.....	1.4	1,375
Average	**4**	.....	**58.9**	**25.9**	*25.0*	**14.8**	.....	**1.3**	**1,105**
Rump steak, as purchased	1	.....	56.3	24.3	*23.5*	18.7	.....	1.5	1,240
Sweetbreads, as purchased	1	.....	69.0	20.2	*19.5*	9.5	.....	2.0	775

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, CANNED—continued.									
Tails, ox:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Edible portion	1	.....	67.9	26.3	*24.6*	6.3	.....	1.2	755
As purchased	1	29.7	47.7	18.5	*17.3*	4.5	.....	.8	535
Tongue, ground, as purchased:									
Minimum	6	.....	42.5	20.1	*20.2*	21.6	.....	2.9	1,305
Maximum	6	.....	54.9	23.6	*22.8*	32.6	.....	5.1	1,750
Average	**6**	.....	**49.9**	**21.4**	*21.0*	**25.1**	.....	**4.0**	**1,455**
Tongue, whole, as purchased:									
Minimum	5	.....	42.4	10.8	*18.6*	15.7	.....	3.0	865
Maximum	5	.....	57.4	23.4	*23.0*	32.7	.....	6.3	1,725
Average	**5**	.....	**51.3**	**19.5**	*21.5*	**23.2**	.....	**4.0**	**1,340**
Tripe, as purchased:									
Minimum	2	.....	68.9	16.5	*16.2*	2.6	.....	.4	425
Maximum	2	.....	80.2	17.0	*16.6*	14.5	.....	.6	920
Average	**2**	.....	**74.6**	**16.8**	*16.4*	**8.5**	.....	**.5**	**670**
BEEF, CORNED AND PICKLED.									
Brisket:									
Edible portion	1	.....	50.9	18.3	*18.7*	24.7	.....	5.7	1,385
As purchased	1	21.4	40.0	14.4	*14.7*	19.4	.....	4.5	1,085
Flank:									
Edible portion—									
Minimum	2	.....	43.2	13.1	*12.9*	24.9	.....	2.8	1,350
Maximum	2	.....	56.5	16.1	*15.5*	41.1	.....	3.1	1,980
Average	**2**	.....	**49.9**	**14.6**	*14.2*	**33.0**	.....	**2.9**	**1,665**
As purchased—									
Minimum	2	9.6	39.0	11.9	*11.7*	21.2	.....	2.5	1,150
Maximum	2	14.6	48.3	13.8	*13.2*	37.2	.....	2.7	1,790
Average	**2**	**12.1**	**43.7**	**12.9**	*12.4*	**29.2**	.....	**2.6**	**1,470**
Plate:									
Edible portion	1	.....	40.1	13.7	*13.3*	41.9	.....	4.7	2,025
As purchased	1	14.5	34.3	11.7	*11.4*	35.8	.....	4.0	1,730
Rump:									
Edible portion—									
Minimum	3	.....	50.2	13.3	*13.3*	13.0	.....	2.0	880
Maximum	3	.....	65.9	17.8	*18.1*	30.2	.....	4.9	1,550
Average	**3**	.....	**58.1**	**15.3**	*15.3*	**23.3**	.....	**3.3**	**1,270**
As purchased—									
Minimum	3	5.0	47.5	12.6	*12.6*	12.1	.....	1.9	815
Maximum	3	7.7	60.8	16.4	*16.7*	28.5	.....	4.7	1,460
Average	**3**	**6.0**	**54.5**	**14.3**	*14.4*	**22.0**	.....	**3.1**	**1,195**
Extra family beef:									
Edible portion	1	.....	37.0	12.3	*11.8*	47.2	.....	4.0	2,220
As purchased	1	10.4	33.1	11.1	*10.6*	42.3	.....	3.6	1,990
Mess beef, salted:									
Edible portion—									
Minimum	2	.....	31.7	11.3	*10.6*	40.2	.....	4.1	1,955
Maximum	2	.....	42.4	13.8	*13.3*	48.7	.....	9.0	2,265
Average	**2**	.....	**37.0**	**12.6**	*12.0*	**44.5**	.....	**6.5**	**2,110**
As purchased—									
Minimum	2	7.1	29.5	10.5	*9.8*	34.6	.....	3.5	1,680
Maximum	2	13.8	36.6	11.9	*11.5*	45.3	.....	3.8	2,105
Average	**2**	**10.5**	**33.0**	**11.2**	*10.7*	**39.9**	.....	**5.9**	**1,890**
Corned beef, all analyses:									
Edible portion	10	.....	53.6	15.6	*15.3*	26.2	.....	4.9	1,395
As purchased	10	8.4	49.2	14.3	*14.0*	23.8	.....	4.6	1,271
Spiced beef, rolled, as purchased	1	.....	30.0	12.0	*11.8*	51.4	.....	6.8	2,390
Tongues, pickled:									
Edible portion—									
Minimum	2	.....	50.9	8.3	*8.0*	15.3	.....	3.1	800
Maximum	2	.....	73.6	17.3	*17.0*	25.8	.....	6.3	1,410
Average	**2**	.....	**62.3**	**12.8**	*12.5*	**20.5**	.....	**4.7**	**1,105**
As purchased—									
Minimum	2	2.1	45.8	8.2	*7.8*	15.0	.....	3.1	785
Maximum	2	10.0	72.0	15.6	*15.3*	23.3	.....	5.6	1,275
Average	**2**	**6.0**	**58.9**	**11.9**	*11.6*	**19.2**	.....	**4.3**	**1,030**
Tripe, as purchased:									
Minimum	4	.....	84.0	7.1	*7.2*	.9	0.4	.1	.185
Maximum	4	.....	91.1	18.6	*18.3*	1.8	.5	.4	335
Average	**4**	.....	**86.5**	**11.7**	*11.8*	**1.2**	**.2**	**.3**	**270**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
BEEF, DRIED, ETC.									
Dried, salted, and smoked:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	7	.....	24.3	24.4	*24.4*	2.8	.....	6.3	570
Maximum	7	.....	65.4	47.8	*47.0*	11.8	2.7	16.9	920
Average	**7**	.....	**54.3**	**30.0**	*29.7*	**6.5**	(3).4	**9.1**	**840**
As purchased—									
Minimum	2	4.4	52.2	25.6	*25.0*	6.0	.....	7.8	760
Maximum	2	5.0	55.1	27.3	*26.7*	7.8	.....	10.0	805
Average	**2**	**4.7**	**53.7**	**26.4**	*25.8*	**6.9**	.....	**8.9**	**780**
VEAL, FRESH.									
Breast, lean:									
Edible portion—									
Minimum	5	.....	68.4	19.6	*18.8*	2.5	.....	1.0	515
Maximum	5	.....	74.9	22.9	*23.1*	8.0	.....	1.3	765
Average	**5**	.....	**72.1**	**21.7**	*21.2*	**5.6**	.....	**1.1**	**640**
As purchased—									
Minimum	5	11.5	38.9	15.5	*12.3*	1.3	.....	.7	285
Maximum	5	46.8	63.7	18.3	*18.3*	6.8	.....	1.0	595
Average	**5**	**26.0**	**53.3**	**16.1**	*15.5*	**4.3**	.....	**.9**	**480**
Breast, medium fat:									
Edible portion—									
Minimum	7	.....	64.7	19.3	*18.2*	12.0	.....	1.0	870
Maximum	7	.....	68.4	21.1	*19.7*	15.4	.....	1.2	1,010
Average	**7**	.....	**66.0**	**19.5**	*19.0*	**14.0**	.....	**1.0**	**955**
As purchased—									
Minimum	7	15.7	48.5	14.2	*14.0*	9.4	.....	.7	680
Maximum	7	25.4	55.7	16.9	*16.2*	12.8	.....	.9	855
Average	**7**	**21.3**	**52.0**	**15.4**	*14.9*	**11.0**	.....	**.8**	**750**
Breast, all analyses:									
Edible portion	12	.....	68.5	20.4	*19.9*	10.5	.....	1.1	820
As purchased	12	23.3	52.5	15.7	*15.2*	8.2	.....	.8	635
Chuck, lean:									
Edible portion	1	.....	76.3	.....	*20.6*	1.9	.....	1.2	465
As purchased	1	19.0	61.8	.....	*16.7*	1.6	.....	.9	380
Chuck, medium fat:									
Edible portion—									
Minimum	6	.....	71.5	19.1	*18.2*	5.1	.....	1.0	570
Maximum	6	.....	75.4	21.1	*20.6*	8.5	.....	1.0	715
Average	**6**	.....	**73.3**	**19.7**	*19.2*	**6.5**	.....	**1.0**	**640**
As purchased—									
Minimum	6	17.6	57.9	15.4	*14.5*	4.2	.....	.8	465
Maximum	6	20.0	61.4	17.1	*16.2*	6.8	.....	.8	585
Average	**6**	**18.9**	**59.5**	**16.0**	*15.6*	**5.2**	.....	**.8**	**515**
Chuck, all analyses:									
Edible portion	7	.....	73.8	19.7	*19.4*	5.8	.....	1.0	610
As purchased	7	19.0	59.8	16.0	*15.7*	4.7	.....	.8	495
Flank, medium fat, as purchased:									
Minimum	5	.....	64.4	19.4	*18.5*	7.8	.....	.9	690
Maximum	5	.....	72.7	21.5	*21.0*	15.8	.....	1.1	1,035
Average	**5**	.....	**68.9**	**20.5**	*19.7*	**10.4**	.....	**1.0**	**820**
Flank, fat, as purchased	1	.....	57.0	18.1	*18.0*	24.1	.....	.9	1,355
Flank, all analyses, as purchased	6	.....	66.9	20.1	*19.4*	12.7	.....	1.0	910
Leg, lean:									
Edible portion—									
Minimum	9	.....	71.5	20.3	*19.3*	1.1	.....	1.1	465
Maximum	9	.....	75.6	22.6	*22.5*	6.4	.....	1.3	660
Average	**9**	.....	**73.5**	**21.3**	*21.2*	**4.1**	.....	**1.2**	**570**
As purchased—									
Minimum	9	4.5	53.3	16.5	*16.5*	3.5	.....	.9	445
Maximum	9	25.5	71.6	21.4	*21.4*	6.0	.....	1.2	620
Average	**9**	**9.1**	**66.8**	**19.4**	*19.3*	**3.7**	.....	**1.1**	**520**
Leg, medium fat:									
Edible portion—									
Minimum	10	.....	67.8	18.2	*18.2*	6.7	.....	1.0	670
Maximum	10	.....	72.1	21.4	*20.7*	11.7	.....	1.2	1,780
Average	**10**	.....	**70.0**	**20.2**	*19.8*	**9.0**	.....	**1.2**	**755**
As purchased—									
Minimum	9	6.9	55.7	14.6	*14.9*	5.5	.....	.9	545
Maximum	9	19.3	64.4	18.3	*18.7*	10.9	.....	1.0	1,655
Average	**9**	**14.2**	**60.1**	**15.5**	*16.9*	**7.9**	.....	**.9**	**620**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
VEAL, FRESH—continued.									
Leg, all analyses:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Edible portion	19	.....	71.7	20.7	*20.5*	6.7	.....	1.1	670
As purchased	18	11.7	63.4	18.3	*18.1*	5.8	.....	1.0	585
Leg, cutlets:									
Edible portion—									
Minimum	3	.....	67.3	20.1	*20.1*	3.3	.....	1.0	515
Maximum	3	.....	75.4	20.5	*21.1*	10.6	.....	1.2	830
Average	**3**	.....	**70.7**	**20.3**	*20.5*	**7.7**	.....	**1.1**	**705**
As purchased—									
Minimum	3	2.1	64.3	19.6	*19.6*	3.3	.....	.9	505
Maximum	3	4.5	73.8	21.1	*20.2*	10.1	.....	1.2	790
Average	**3**	**3.4**	**68.3**	**20.1**	*19.8*	**7.5**	.....	**1.0**	**690**
Loin, lean:									
Edible portion—									
Minimum	5	.....	71.3	18.8	*18.6*	4.8	.....	1.0	565
Maximum	5	.....	75.4	21.5	*21.0*	6.7	.....	1.2	680
Average	**5**	.....	**73.3**	**20.4**	*19.9*	**5.6**	.....	**1.2**	**615**
As purchased—									
Minimum	5	17.4	53.2	13.4	*13.5*	3.5	.....	.8	395
Maximum	5	29.0	59.7	17.7	*16.8*	5.4	.....	1.0	555
Average	**5**	**22.0**	**57.1**	**15.9**	*15.6*	**4.4**	.....	**.9**	**480**
Loin, medium fat:									
Edible portion—									
Minimum	6	.....	67.9	18.3	*18.1*	10.1	.....	1.0	805
Maximum	6	.....	69.7	20.3	*20.0*	13.0	.....	1.1	890
Average	**6**	.....	**69.0**	**19.9**	*19.2*	**10.8**	.....	**1.0**	**825**
As purchased—									
Minimum	6	12.2	55.3	16.0	*15.4*	8.2	.....	.8	645
Maximum	6	20.3	60.1	17.5	*16.6*	11.4	.....	.9	780
Average	**6**	**16.5**	**57.6**	**16.6**	*16.0*	**9.0**	.....	**.9**	**690**
Loin, fat:									
Edible portion—									
Minimum	2	.....	61.3	18.0	*18.3*	18.3	.....	1.0	1,130
Maximum	2	.....	61.9	19.3	*18.7*	19.4	.....	1.1	1,155
Average	**2**	.....	**61.6**	**18.7**	*18.5*	**18.9**	.....	**1.0**	**1,145**
As purchased—									
Minimum	2	16.3	48.9	14.4	*14.6*	15.4	.....	.8	920
Maximum	2	20.2	51.8	16.2	*15.7*	15.5	.....	.8	950
Average	**2**	**18.3**	**50.4**	**15.3**	*15.1*	**15.4**	.....	**.8**	**935**
Loin, all analyses:									
Edible portion	13	.....	69.5	19.9	*19.4*	10.0	.....	1.1	790
As purchased	13	18.9	56.3	16.1	*15.7*	8.2	.....	.9	645
Loin, with kidney:									
Edible portion	1	.....	73.3	14.7	*14.1*	11.8	.....	.8	770
As purchased	1	9.1	66.7	13.4	*12.8*	10.7	.....	.7	700
Neck:									
Edible portion—									
Minimum	6	.....	69.8	19.9	*18.7*	4.3	.....	.9	555
Maximum	6	.....	75.8	20.8	*20.0*	9.2	.....	1.1	775
Average	**6**	.....	**72.6**	**20.3**	*19.5*	**6.9**	.....	**1.0**	**670**
As purchased—									
Minimum	6	23.5	34.8	10.4	*10.0*	3.1	.....	.6	385
Maximum	6	50.0	56.1	15.2	*14.5*	6.2	.....	.8	540
Average	**6**	**31.5**	**49.9**	**13.9**	*13.3*	**4.6**	.....	**.7**	**455**
Rib, medium fat:									
Edible portion—									
Minimum	9	.....	70.4	20.0	*19.2*	3.4	.....	1.0	530
Maximum	9	.....	75.5	21.7	*21.2*	9.3	.....	1.2	770
Average	**9**	.....	**72.7**	**20.7**	*20.1*	**6.1**	.....	**1.1**	**640**
As purchased—									
Minimum	9	12.7	42.2	12.7	*12.4*	2.5	.....	.7	390
Maximum	9	41.3	64.5	17.3	*16.8*	6.8	.....	1.1	565
Average	**9**	**25.3**	**54.3**	**15.5**	*15.0*	**4.6**	.....	**.8**	**480**
Rib, fat:									
Edible portion—									
Minimum	3	.....	50.1	16.2	*17.5*	11.1	.....	.9	840
Maximum	3	.....	67.8	20.0	*20.0*	31.5	.....	1.1	1,630
Average	**3**	.....	**60.9**	**18.7**	*18.8*	**19.3**	.....	**1.0**	**1,160**
As purchased—									
Minimum	3	22.4	37.4	12.1	*13.1*	8.6	.....	.6	650
Maximum	3	25.4	52.6	15.5	*15.5*	23.5	.....	.9	1,215
Average	**3**	**24.3**	**46.2**	**14.2**	*14.2*	**14.5**	.....	**.8**	**875**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
VEAL, FRESH—continued.									
Rib, all analyses:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Edible portion	12	.....	69.8	20.2	*19.7*	9.4	.....	1.1	775
As purchased	12	25.0	52.3	15.2	*14.8*	7.1	.....	.8	580
Rump:									
Edible portion	1	.....	62.6	19.8	*20.1*	16.2	.....	1.1	1,050
As purchased	1	30.2	43.7	13.8	*14.0*	11.3	.....	.8	735
Shank, fore:									
Edible portion—									
Minimum	6	.....	72.5	19.8	*18.9*	4.1	.....	1.0	540
Maximum	6	.....	75.8	21.4	*20.6*	6.4	.....	1.0	655
Average	**6**	.....	**74.0**	**20.7**	*19.8*	**5.2**	.....	**1.0**	**605**
As purchased—									
Minimum	6	20.4	35.1	9.5	*9.0*	2.2	.....	.5	295
Maximum	6	52.5	58.6	16.7	*16.0*	4.2	.....	.8	490
Average	**6**	**40.4**	**44.1**	**12.2**	*11.8*	**3.1**	.....	**.6**	**360**
Shank, hind, medium fat:									
Edible portion—									
Minimum	6	.....	73.4	18.9	*17.9*	3.0	.....	.9	520
Maximum	6	.....	76.2	21.6	*20.9*	6.7	.....	1.1	635
Average	**6**	.....	**74.5**	**20.7**	*19.9*	**4.6**	.....	**1.0**	**580**
As purchased—									
Minimum	6	61.1	25.9	7.1	*6.7*	1.2	.....	.4	195
Maximum	6	64.7	29.3	8.2	*8.0*	2.5	.....	.4	235
Average	**6**	**62.7**	**27.8**	**7.7**	*7.4*	**1.7**	.....	**.4**	**215**
Shank, hind, fat:									
Edible portion	1	.....	68.1	20.5	*20.0*	10.7	.....	1.2	835
As purchased	1	51.4	33.1	10.0	*9.7*	5.2	.....	.6	405
Shank, hind, all analyses:									
Edible portion	7	.....	73.6	20.7	*19.9*	5.5	.....	1.0	615
As purchased	7	61.1	28.6	8.0	*7.7*	2.2	.....	.4	240
Forequarter:									
Edible portion—									
Minimum	6	.....	69.9	19.5	*18.6*	5.5	.....	.8	595
Maximum	6	.....	74.8	20.9	*20.5*	10.6	.....	1.1	810
Average	**6**	.....	**71.7**	**20.0**	*19.4*	**8.0**	.....	**.9**	**710**
As purchased—									
Minimum	6	19.3	51.8	14.5	*13.7*	4.1	.....	.6	445
Maximum	6	26.0	56.6	16.1	*15.9*	7.8	.....	.8	600
Average	**6**	**24.5**	**54.2**	**15.1**	*14.6*	**6.0**	.....	**.7**	**535**
Hind quarter:									
Edible portion—									
Minimum	6	.....	68.4	19.6	*19.4*	5.6	.....	.8	620
Maximum	6	.....	73.8	20.8	*20.4*	11.2	.....	1.2	835
Average	**6**	.....	**70.9**	**20.7**	*19.8*	**8.3**	.....	**1.0**	**735**
As purchased—									
Minimum	6	18.0	53.7	15.7	*15.3*	4.4	.....	.6	490
Maximum	6	24.0	58.4	16.8	*16.2*	9.2	.....	.9	690
Average	**6**	**20.7**	**56.2**	**16.2**	*15.7*	**6.6**	.....	**.8**	**580**
Side, with kidney, fat, and tallow:									
Edible portion—									
Minimum	6	.....	69.2	19.8	*19.2*	5.5	.....	.9	605
Maximum	6	.....	74.3	20.7	*20.4*	10.3	.....	1.1	805
Average	**6**	.....	**71.3**	**20.2**	*19.6*	**8.1**	.....	**1.0**	**715**
As purchased—									
Minimum	6	18.6	53.3	15.4	*14.7*	4.3	.....	.7	470
Maximum	6	24.9	57.3	16.1	*15.9*	8.4	.....	.9	655
Average	**6**	**22.6**	**55.2**	**15.6**	*15.1*	**6.3**	.....	**.8**	**555**
Heart, as purchased	1	.....	73.2	16.8	*16.2*	9.6	.....	1.0	720
Kidneys, as purchased:									
Minimum	2	.....	74.7	16.6	*16.4*	5.4	.....	1.3	545
Maximum	2	.....	76.8	17.1	*16.6*	7.4	.....	1.4	620
Average	**2**	.....	**75.8**	**16.9**	*16.5*	**6.4**	.....	**1.3**	**585**
Liver, as purchased:									
Minimum	2	.....	72.4	18.4	*19.8*	4.0	.....	1.2	535
Maximum	2	.....	73.7	19.6	*21.0*	6.6	.....	1.3	620
Average	**2**	.....	**73.0**	**19.0**	*20.4*	**5.3**	.....	**1.3**	**575**
Lungs, as purchased	1	.....	76.8	17.1	*17.1*	5.0	.....	1.1	530
LAMB, FRESH.									
Breast or chuck:									
Edible portion	1	.....	56.2	19.1	*19.2*	23.6	.....	1.0	1,350
As purchased	1	19.1	45.5	15.4	*15.5*	19.1	.....	.8	1,090

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
LAMB, FRESH—continued.									
Leg, hind, medium fat:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	63.1	18.7	*18.1*	15.3	.....	1.1	1,010
Maximum	2	.....	64.7	19.7	*18.9*	17.6	.....	1.2	1,090
Average	**2**	.....	**63.9**	**19.2**	*18.5*	**16.5**	.....	**1.1**	**1,055**
As purchased—									
Minimum	2	17.0	52.4	15.5	*15.0*	12.6	.....	.9	830
Maximum	2	17.7	53.3	16.2	*15.5*	14.6	.....	1.0	905
Average	**2**	**17.4**	**52.9**	**15.9**	*15.2*	**13.6**	.....	**.9**	**870**
Leg, hind, fat:									
Edible portion	1	.....	54.6	18.3	*17.1*	27.4	.....	.9	1,495
As purchased	1	13.4	47.3	15.8	*14.8*	23.7	.....	.8	1,295
Leg, hind, very fat:									
Edible portion	1	.....	51.8	17.6	*17.2*	30.1	.....	.9	1,595
As purchased	1	7.0	48.2	16.4	*16.0*	28.0	.....	.8	1,485
Leg, hind, all analyses:									
Edible portion	4	.....	58.6	18.6	*17.8*	22.6	.....	1.0	1,300
As purchased	4	13.8	50.3	16.0	*15.3*	19.7	.....	.9	1,130
Loin, without kidney and tallow:									
Edible portion—									
Minimum	4	.....	48.6	16.9	*15.5*	25.1	.....	.8	1,420
Maximum	4	.....	54.8	20.2	*19.0*	35.1	.....	1.1	1,795
Average	**4**	.....	**53.1**	**18.7**	*17.6*	**28.3**	.....	**1.0**	**1,540**
As purchased—									
Minimum	4	12.2	40.8	14.2	*13.0*	21.1	.....	.7	1,200
Maximum	4	17.4	48.1	17.1	*16.7*	29.5	.....	.9	1,510
Average	**4**	**14.8**	**45.3**	**16.0**	*15.0*	**24.1**	.....	**.8**	**1,315**
Neck:									
Edible portion	1	.....	56.7	17.7	*17.5*	24.8	.....	1.0	1,375
As purchased	1	17.7	46.7	14.6	*14.4*	20.4	.....	.8	1,135
Leg, free from all visible fat, as purchased	1	.....	72.3	25.3	*23.6*	2.7	.....	1.4	585
Shoulder:									
Edible portion	1	.....	51.8	18.1	*17.5*	29.7	.....	1.0	1,590
As purchased	1	20.3	41.3	14.4	*14.0*	23.6	.....	.8	1,265
Forequarter:									
Edible portion	1	.....	55.1	18.3	*18.1*	25.8	.....	1.0	1,430
As purchased	1	18.8	44.7	14.9	*14.7*	21.0	.....	.8	1,165
Hind quarter:									
Edible portion	1	.....	60.9	19.6	*19.0*	19.1	.....	1.0	1,170
As purchased	1	15.7	51.3	16.5	*16.0*	16.1	.....	.9	985
Side, without tallow:									
Edible portion—									
Minimum	3	.....	56.8	17.0	*16.5*	21.2	.....	1.0	1,235
Maximum	3	.....	60.0	18.9	*18.5*	25.7	.....	1.1	1,400
Average	**3**	.....	**58.2**	**17.6**	*17.6*	**23.1**	.....	**1.1**	**1,300**
As purchased—									
Minimum	3	17.3	46.1	13.8	*13.4*	16.6	.....	.8	965
Maximum	3	21.6	47.9	15.6	*15.3*	20.9	.....	.9	1,140
Average	**3**	**19.3**	**47.0**	**14.1**	*14.2*	**18.7**	.....	**.8**	**1,055**
LAMB, COOKED.									
Chops, broiled:									
Edible portion—									
Minimum	4	.....	43.4	19.2	*19.2*	24.3	.....	1.1	1,495
Maximum	4	.....	50.4	25.2	*23.6*	34.7	.....	1.7	1,860
Average	**4**	.....	**47.6**	**21.7**	*21.2*	**29.9**	.....	**1.3**	**1,665**
As purchased	1	13.5	40.1	18.4	*18.5*	26.7	.....	1.2	1,470
Cut not given, as purchased	1	.....	47.1	23.7	*22.1*	29.4	.....	1.4	1,680
Leg, roast	1	.....	67.1	19.7	19.4	12.7	.....	.8	900
LAMB, CANNED.									
Tongue, spiced and cooked:									
Edible portion	1	.....	67.4	13.9	*14.3*	17.8	.....	.5	1,010
As purchased	1	2.6	65.7	13.5	*13.9*	17.3	.....	.5	980
MUTTON, FRESH.									
Chuck, lean:									
Edible portion	1	.....	64.7	17.8	*18.1*	16.3	.....	.9	1,020
As purchased	1	19.5	52.1	14.3	*14.5*	13.1	.....	.8	820

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
MUTTON, FRESH—continued.									
Chuck, medium fat:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	6	.....	47.9	14.4	*13.6*	26.0	.....	0.7	1,400
Maximum	6	.....	56.7	16.3	*16.4*	37.4	.....	1.2	1,845
Average	**6**	.....	**50.9**	**15.1**	*14.6*	**33.6**	.....	**.9**	**1,700**
As purchased—									
Minimum	6	14.4	36.6	11.2	*10.5*	20.6	.....	.6	1,110
Maximum	6	25.2	45.1	13.0	*13.1*	30.6	.....	.9	1,500
Average	**6**	**21.3**	**39.9**	**11.9**	*11.5*	**26.7**	.....	**.6**	**1,350**
Chuck, fat:									
Edible portion—									
Minimum	2	.....	37.6	13.7	*13.3*	42.5	.....	.7	2,055
Maximum	2	.....	43.5	14.0	*14.2*	47.2	.....	1.0	2,245
Average	**2**	.....	**40.6**	**13.9**	*13.7*	**44.9**	.....	**.8**	**2,155**
As purchased—									
Minimum	2	14.9	32.0	11.5	*10.9*	34.8	.....	.6	1,685
Maximum	2	18.1	35.6	11.7	*12.1*	40.1	.....	.9	1,910
Average	**2**	**16.5**	**33.8**	**11.6**	*11.5*	**37.5**	.....	**.7**	**1,800**
Chuck, very fat:									
Edible portion	1	.....	29.9	9.6	*9.4*	60.1	.....	.6	2,715
As purchased	1	13.8	25.8	8.3	*8.1*	51.8	.....	.5	2,340
Chuck, all analyses:									
Edible portion	10	.....	48.2	14.6	*14.2*	36.8	.....	.8	1,825
As purchased	10	19.4	38.5	11.7	*11.4*	30.0	.....	.7	1,485
Flank, medium fat:									
Edible portion—									
Minimum	8	.....	38.7	12.4	*11.9*	32.1	.....	.5	1,670
Maximum	8	.....	51.2	17.1	*16.0*	45.0	.....	.8	2,190
Average	**8**	.....	**46.2**	**15.2**	*14.8*	**38.3**	.....	**.7**	**1,900**
As purchased—									
Minimum	2	2.2	37.8	12.2	*11.8*	29.6	.....	.5	1,475
Maximum	2	17.7	40.2	15.3	*15.4*	44.1	.....	.7	2,145
Average	**2**	**9.9**	**39.0**	**13.8**	*13.6*	**36.9**	.....	**.6**	**1,815**
Flank, very fat, as purchased:									
Minimum	2	.....	25.0	8.6	*9.5*	54.7	.....	.6	2,545
Maximum	2	.....	32.7	12.8	*12.0*	64.9	.....	.6	2,900
Average	**2**	.....	**28.9**	**10.7**	*10.7*	**59.8**	.....	**.6**	**2,725**
Flank, all analyses:									
Edible portion	10	.....	42.7	14.3	*14.0*	42.6	.....	.7	2,065
As purchased	2	9.9	39.0	13.8	*13.6*	36.9	.....	.6	1,815
Leg, hind, lean:									
Edible portion—									
Minimum	3	.....	66.6	19.3	*18.5*	11.9	.....	1.0	875
Maximum	3	.....	68.3	20.2	*19.6*	13.0	.....	1.2	920
Average	**3**	.....	**67.4**	**19.8**	*19.1*	**12.4**	.....	**1.1**	**890**
As purchased—									
Minimum	3	3.4	51.0	14.7	*14.1*	9.3	.....	.8	665
Maximum	3	23.7	65.0	19.5	*19.0*	11.5	.....	1.1	850
Average	**3**	**16.8**	**56.1**	**16.5**	*15.9*	**10.3**	.....	**.9**	**740**
Leg, hind, medium fat:									
Edible portion—									
Minimum	11	.....	58.4	17.4	*17.3*	14.6	.....	.9	955
Maximum	11	.....	65.3	19.4	*19.0*	22.5	.....	1.0	1,295
Average	**11**	.....	**62.8**	**18.5**	*18.2*	**18.0**	.....	**1.0**	**1,105**
As purchased—									
Minimum	11	9.8	48.0	13.8	*13.4*	11.0	.....	.7	730
Maximum	11	26.0	55.7	17.5	*17.1*	19.3	.....	.9	1,105
Average	**11**	**18.4**	**51.2**	**15.1**	*14.9*	**14.7**	.....	**.8**	**900**
Leg, hind, fat:									
Edible portion	1	.....	55.0	17.3	*17.0*	27.1	.....	.9	1,465
As purchased	1	12.4	48.2	15.2	*14.8*	23.8	.....	.8	1,290
Leg, hind, all analyses:									
Edible portion	15	.....	63.2	18.7	*18.3*	17.5	.....	1.0	1,085
As purchased	15	17.7	51.9	15.4	*15.1*	14.5	.....	.8	900
Loin, without kidney or tallow, medium fat:									
Edible portion—									
Minimum	13	.....	44.9	13.7	*13.8*	25.9	.....	.7	1,430
Maximum	13	.....	55.9	19.6	*19.5*	37.6	.....	1.0	1,860
Average	**13**	.....	**50.2**	**16.0**	*15.9*	**33.1**	.....	**.8**	**1,695**
As purchased—									
Minimum	12	11.7	38.1	11.3	*11.5*	20.9	.....	.5	1,155
Maximum	12	23.8	46.8	14.7	*14.9*	32.9	.....	.9	1,640
Average	**12**	**16.0**	**42.0**	**13.5**	*13.0*	**28.3**	.....	**.7**	**1,445**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
MUTTON, FRESH—continued.									
Loin, without kidney or tallow, fat:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	3	.....	42.0	14.5	*13.9*	40.9	.....	0.7	1,995
Maximum	3	.....	44.3	15.1	*14.6*	43.3	.....	.8	2,100
Average	**3**	.....	**43.3**	**14.7**	*14.2*	**41.7**	.....	**.8**	**2,035**
As purchased—									
Minimum	3	11.3	37.1	12.8	*12.3*	36.0	.....	.6	1,770
Maximum	3	12.0	39.3	13.3	*12.9*	38.2	.....	.7	1,850
Average	**3**	**11.7**	**38.3**	**13.0**	*12.5*	**36.8**	.....	**.7**	**1,795**
Loin, without kidney or tallow, very fat:									
Edible portion	1	.....	30.8	10.6	*10.0*	58.7	.....	.5	2,675
As purchased	1	9.0	28.1	9.6	*9.1*	53.4	.....	.4	2,435
Loin, without kidney or tallow, all analyses:									
Edible portion	17	.....	47.8	15.5	*15.2*	36.2	.....	.8	1,815
As purchased	16	14.8	40.4	13.1	*12.7*	31.5	.....	.6	1,575
Loin, free fat removed	1	.....	56.5	23.7	*23.9*	18.5	.....	1.1	1,225
Neck, medium fat:									
Edible portion—									
Minimum	10	.....	54.7	12.8	*12.4*	17.8	.....	.8	1,125
Maximum	10	.....	61.9	20.0	*19.2*	29.5	.....	1.1	1,540
Average	**10**	.....	**58.1**	**16.9**	*16.3*	**24.6**	.....	**1.0**	**1,355**
As purchased—									
Minimum	10	17.2	38.4	8.4	*8.1*	14.0	.....	.6	840
Maximum	10	34.9	48.6	15.7	*15.1*	24.5	.....	.8	1,280
Average	**10**	**27.4**	**42.1**	**12.3**	*11.9*	**17.9**	.....	**.7**	**985**
Neck, very fat:									
Edible portion	1	.....	42.1	13.9	*13.6*	43.5	.....	.8	2,095
As purchased	1	16.1	35.3	11.7	*11.4*	36.5	.....	.7	1,760
Neck, all analyses:									
Edible portion	11	.....	56.6	16.7	*16.1*	26.3	.....	1.0	1,420
As purchased	11	26.4	41.5	12.2	*11.8*	19.6	.....	.7	1,055
Shoulder, lean:									
Edible portion	1	.....	67.2	19.5	*18.9*	12.9	.....	1.0	905
As purchased	1	25.3	50.2	14.6	*14.2*	9.6	.....	.7	675
Shoulder, medium fat:									
Edible portion—									
Minimum	7	.....	58.6	16.6	*15.8*	15.6	.....	.9	1,115
Maximum	7	.....	65.2	18.3	*18.2*	24.3	.....	.9	1,335
Average	**7**	.....	**61.9**	**17.7**	*17.3*	**19.9**	.....	**.9**	**1,170**
As purchased—									
Minimum	7	14.6	45.0	12.6	*12.1*	13.4	.....	.6	835
Maximum	7	27.2	55.7	15.5	*15.5*	18.8	.....	.8	1,075
Average	**7**	**22.5**	**47.9**	**13.7**	*13.4*	**15.5**	.....	**.7**	**910**
Shoulder, fat:									
Edible portion	1	.....	53.0	16.2	*15.9*	30.3	.....	.8	1,580
As purchased	1	19.5	42.7	13.0	*12.8*	24.4	.....	.6	1,270
Shoulder, very fat:									
Edible portion	1	.....	48.4	15.6	*15.2*	35.6	.....	.8	1,790
As purchased	1	18.7	39.3	12.7	*12.4*	28.9	.....	.7	1,455
Shoulder, all analyses:									
Edible portion	10	.....	60.2	17.5	*17.1*	21.8	.....	.9	1,245
As purchased	10	22.1	46.8	13.7	*13.3*	17.1	.....	.7	975
Forequarter:									
Edible portion—									
Minimum	10	.....	37.2	12.1	*11.7*	17.1	.....	.7	1,040
Maximum	10	.....	64.3	17.2	*17.6*	50.4	.....	1.1	2,350
Average	**10**	.....	**52.9**	**15.6**	*15.3*	**30.9**	.....	**.9**	**1,595**
As purchased—									
Minimum	10	15.7	31.4	10.2	*9.9*	13.3	.....	.5	810
Maximum	10	24.9	50.0	13.8	*13.7*	42.4	.....	.8	1,980
Average	**10**	**21.2**	**41.6**	**12.3**	*12.0*	**24.5**	.....	**.7**	**1,265**
Hind quarter:									
Edible portion—									
Minimum	10	.....	40.4	13.2	*12.9*	21.4	.....	.6	1,235
Maximum	10	.....	60.4	18.2	*17.4*	46.1	.....	1.0	2,190
Average	**10**	.....	**54.8**	**16.7**	*16.3*	**28.1**	.....	**.8**	**1,495**
As purchased—									
Minimum	10	9.8	36.5	11.9	*11.6*	17.7	.....	.6	1,020
Maximum	10	22.4	50.0	15.7	*14.7*	41.5	.....	.8	1,975
Average	**10**	**17.2**	**45.4**	**13.8**	*13.5*	**23.2**	.....	**.7**	**1,235**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
MUTTON, FRESH—continued.									
Side, including tallow:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	25	.....	47.2	14.5	*14.0*	14.7	.....	0.7	965
Maximum	25	.....	55.9	18.9	*18.4*	38.0	.....	1.0	1,860
Average	**25**	.....	**54.2**	**16.3**	*16.0*	**28.9**	.....	**.9**	**1,520**
As purchased—									
Minimum	25	13.0	40.7	12.2	*11.7*	11.2	.....	.6	730
Maximum	25	22.8	55.2	14.9	*14.4*	33.1	.....	.8	1,625
Average	**25**	**18.1**	**45.4**	**13.0**	*12.7*	**23.1**	.....	**.7**	**1,215**
Side, not including tallow:									
Edible portion—									
Minimum	10	.....	38.8	12.6	*12.3*	23.3	.....	.7	1,295
Maximum	10	.....	58.8	17.4	*17.4*	48.2	.....	.9	2,265
Average	**10**	.....	**53.6**	**16.2**	*15.8*	**29.8**	.....	**.8**	**1,560**
As purchased—									
Minimum	10	12.9	33.8	11.0	*10.7*	18.1	.....	.6	1,005
Maximum	10	22.7	47.3	14.7	*13.8*	42.0	.....	.8	1,975
Average	**10**	**19.3**	**43.3**	**13.0**	*12.7*	**24.0**	.....	**.7**	**1,255**
MUTTON, COOKED.									
Mutton, leg roast, edible portion:									
Minimum	2	.....	50.8	23.3	*23.2*	20.5	.....	1.2	1,380
Maximum	2	.....	51.0	27.8	*27.4*	24.6	.....	1.3	1,470
Average	**2**	.....	**50.9**	**25.0**	*25.3*	**22.6**	.....	**1.2**	**1,420**
MUTTON ORGANS.									
Heart, as purchased:									
Minimum	2	.....	67.4	15.8	*15.6*	11.9	.....	.9	795
Maximum	2	.....	71.6	18.0	*18.3*	13.4	.....	.9	890
Average	**2**	.....	**69.5**	**16.9**	*17.0*	**12.6**	.....	**.9**	**845**
Kidneys, as purchased	1	.....	78.7	16.5	*16.8*	3.2	.....	1.3	440
Kidney and kidney fat, as purchased	1	.....	18.8	6.2	*4.3*	76.5	.....	.4	3,345
Kidney fat, as purchased:									
Minimum	2	.....	2.9	1.7	*1.1*	94.9	.....	.1	4,035
Maximum	2	.....	3.9	1.8	*1.2*	95.8	.....	.1	4,075
Average	**2**	.....	**3.4**	**1.8**	*1.1*	**95.4**	.....	**.1**	**4,060**
Liver, as purchased:									
Minimum	2	.....	52.7	23.1	.....	4.7	2.1	1.4	645
Maximum	2	.....	69.8	24.2	.....	13.2	7.9	2.0	1,155
Average	**2**	.....	**61.2**	**23.1**	.....	**9.0**	**5.0**	**1.7**	**905**
Lungs, as purchased:									
Minimum	2	.....	74.6	19.0	*18.8*	2.6	.....	1.2	475
Maximum	2	.....	77.1	21.4	*21.5*	2.9	.....	1.3	505
Average	**2**	.....	**75.9**	**20.2**	*20.1*	**2.8**	.....	**1.2**	**495**
MUTTON, CANNED.									
Corned, as purchased	1	.....	45.8	28.8	*27.2*	22.8	.....	4.2	1,500
Tongue, as purchased	1	.....	47.6	24.4	*23.6*	24.0	.....	4.8	1,465
PORK, FRESH.									
Chuck ribs and shoulder:									
Edible portion—									
Minimum	2	.....	50.3	17.2	*16.8*	30.4	.....	.9	1,605
Maximum	2	.....	51.9	17.3	*16.9*	31.9	.....	.9	1,665
Average	**2**	.....	**51.1**	**17.3**	*16.9*	**31.1**	.....	**.9**	**1,635**
As purchased—									
Minimum	2	15.9	40.1	13.7	*13.5*	25.4	.....	.7	1,325
Maximum	2	20.3	43.6	14.5	*14.1*	25.6	.....	.8	1,350
Average	**2**	**18.1**	**41.8**	**14.1**	*13.8*	**25.5**	.....	**.8**	**1,340**
Flank:									
Edible portion—									
Minimum	3	.....	56.0	17.2	*16.2*	19.4	.....	.9	1,180
Maximum	3	.....	60.7	19.5	*18.9*	26.9	.....	1.0	1,455
Average	**3**	.....	**59.0**	**18.5**	*17.8*	**22.2**	.....	**1.0**	**1,280**
As purchased—									
Minimum	3	11.3	45.4	13.9	*12.9*	15.0	.....	.6	900
Maximum	3	23.9	54.0	16.5	*15.3*	22.0	.....	.8	1,160
Average	**3**	**18.0**	**48.5**	**15.1**	*14.2*	**18.6**	.....	**.7**	**1,065**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
PORK, FRESH—continued.									
Ham, fresh, lean:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	55.6	19.8	*18.8*	13.0	.....	1.0	1,035
Maximum	2	.....	64.4	30.2	*30.2*	15.8	.....	1.6	1,110
Average	**2**	.....	**60.0**	**25.0**	*24.3*	**14.4**	.....	**1.3**	**1,075**
As purchased—									
Minimum	2	.....	55.6	19.4	*18.5*	13.0	.....	.9	1,015
Maximum	2	1.8	63.3	30.2	*29.8*	15.5	.....	1.6	1,110
Average	**2**	**.9**	**59.4**	**24.8**	*24.2*	**14.2**	.....	**1.3**	**1,060**
Ham, fresh, medium fat: *a*									
Edible portion—									
Minimum	10	.....	37.3	9.9	*12.8*	21.2	.....	.6	1,225
Maximum	10	.....	60.3	20.3	*22.0*	39.4	.....	1.3	2,070
Average	**10**	.....	**53.9**	**15.3**	*16.4*	**28.9**	.....	**.8**	**1,505**
As purchased—									
Minimum	10	4.6	34.1	8.7	*11.3*	19.4	.....	.6	1,120
Maximum	10	14.2	54.7	18.5	*20.0*	36.0	.....	1.2	1,890
Average	**10**	**10.7**	**48.0**	**13.5**	*14.6*	**25.9**	.....	**.8**	**1,345**
Ham, fresh, fat: *b*									
Edible portion—									
Minimum	5	.....	30.4	10.7	*8.0*	43.8	.....	.5	2,030
Maximum	5	.....	44.3	14.2	*12.1*	61.1	.....	.8	2,825
Average	**5**	.....	**38.7**	**12.4**	*10.6*	**50.0**	.....	**.7**	**2,345**
As purchased—									
Minimum	5	9.7	25.9	9.5	*6.8*	37.8	.....	.4	1,790
Maximum	5	16.3	40.0	12.2	*10.4*	52.2	.....	.7	2,410
Average	**5**	**13.2**	**33.6**	**10.7**	*9.2*	**43.5**	.....	**.5**	**2,035**
Ham, fresh, average all analyses:									
Edible portion	17	.....	50.1	15.7	*15.6*	33.4	.....	.9	1,700
As purchased	17	10.3	45.1	14.3	*14.1*	29.7	.....	.8	1,520
Ham, fresh, visible fat largely removed	**3**	.....	**64.5**	**19.2**	*18.4*	**16.2**	.....	**.9**	**1,040**
Head:									
Edible portion—									
Minimum	3	.....	38.4	11.6	*10.5*	34.5	.....	.6	1,725
Maximum	3	.....	50.5	14.5	*14.2*	50.5	.....	.8	2,350
Average	**3**	.....	**45.3**	**13.4**	*12.7*	**41.3**	.....	**.7**	**1,990**
As purchased—									
Minimum	3	51.7	10.7	3.2	*3.0*	8.2	.....	.2	410
Maximum	3	77.2	18.5	5.6	*5.1*	24.4	.....	.3	1,135
Average	**3**	**68.4**	**13.8**	**4.1**	*3.8*	**13.8**	.....	**.2**	**660**
Head cheese:									
Edible portion—									
Minimum	3	.....	38.1	17.4	*18.4*	27.4	.....	3.0	1,555
Maximum	3	.....	48.1	21.5	*21.1*	40.5	.....	3.4	2,035
Average	**3**	.....	**43.3**	**19.5**	*16.9*	**33.8**	.....	**3.3**	**1,790**
As purchased	1	12.1	42.3	18.9	*18.6*	24.0	.....	3.0	1,365
Loin (chops), lean:									
Edible portion	1	.....	60.3	20.3	*19.7*	19.0	.....	1.0	1,180
As purchased	1	23.5	46.1	15.5	*15.1*	14.5	.....	.8	900
Loin (chops), medium fat:									
Edible portion— *c*									
Minimum	19	.....	49.1	13.8	*14.9*	25.0	.....	.8	1,415
Maximum	19	.....	55.2	19.4	*18.9*	35.2	.....	1.1	1,785
Average	**19**	.....	**52.0**	**16.6**	*16.9*	**30.1**	.....	**1.0**	**1,580**
As purchased—									
Minimum	19	11.5	36.3	10.6	*11.7*	20.0	.....	.6	1,090
Maximum	19	28.2	46.9	16.1	*16.3*	31.1	.....	.8	1,575
Average	**19**	**19.7**	**41.8**	**13.4**	*13.5*	**24.2**	.....	**.8**	**1,270**
Loin (chops), fat:									
Edible portion—									
Minimum	4	.....	39.7	11.3	*11.0*	38.8	.....	.6	1,995
Maximum	4	.....	46.7	19.3	*15.8*	48.6	.....	.7	2,260
Average	**4**	.....	**41.8**	**14.5**	*13.1*	**44.4**	.....	**.7**	**2,145**
As purchased—									
Minimum	4	10.1	32.0	10.2	*9.9*	30.4	.....	.6	1,560
Maximum	4	22.2	36.5	15.1	*12.3*	43.7	.....	.6	2,035
Average	**4**	**16.5**	**34.8**	**11.9**	*10.9*	**37.2**	.....	**.6**	**1,790**
Loin (chops), average all analyses:									
Edible portion	24	.....	50.7	16.4	*16.4*	32.0	.....	.9	1,655
As purchased	24	19.3	40.8	13.2	*13.1*	26.0	.....	.8	1,340

a Seven samples contained an average of lecithin 0.32, gelatinoids 0.8, and "flesh bases 1.28 per cent."
b One sample contained lecithin 0.45, gelatinoids 0.9, and "flesh bases 0.8 per cent."
c Eight samples contained an average of lecithin 0.35, gelatinoids 1.0, and "flesh bases 1.5 per cent."

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
PORK, FRESH—continued.									
		P. ct.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Loin, tenderloin, as purchased: *a*									
Minimum	11	.....	62.4	15.8	*16.6*	9.3	.....	0.9	770
Maximum	11	.....	72.8	20.5	*21.4*	17.1	.....	1.2	1,100
Average	**11**	.....	**66.5**	**18.9**	*19.5*	**13.0**	.....	**1.0**	**900**
Middle cuts:									
Edible portion—									
Minimum	3	.....	46.0	15.7	*14.5*	34.9	.....	.7	1,760
Maximum	3	.....	49.4	15.7	*15.2*	38.8	.....	.8	1,925
Average	**3**	.....	**48.2**	**15.7**	*14.8*	**36.3**	.....	**.7**	**1,825**
As purchased—									
Minimum	3	12.7	35.5	12.1	*11.3*	26.5	.....	.6	1,345
Maximum	3	23.5	42.8	13.7	*13.2*	30.5	.....	.8	1,510
Average	**3**	**19.7**	**38.6**	**12.7**	*12.1*	**28.9**	.....	**.7**	**1,455**
Shoulder:									
Edible portion— *b*									
Minimum	19	.....	44.0	9.4	*10.4*	18.5	.....	.6	1,105
Maximum	19	.....	63.6	17.4	*17.0*	49.3	.....	.9	2,260
Average	**19**	.....	**51.2**	**13.3**	*13.8*	**34.2**	.....	**.8**	**1,690**
As purchased—									
Minimum	19	3.9	36.1	8.3	*9.5*	14.6	.....	.5	870
Maximum	19	21.1	56.0	16.3	*16.1*	45.1	.....	.9	2,065
Average	**19**	**12.4**	**44.9**	**12.0**	*12.2*	**29.8**	.....	**.7**	**1,480**
Side, lard and other fat included:									
Edible portion—									
Minimum	3	.....	26.2	8.4	*7.8*	59.1	.....	.4	2,675
Maximum	3	.....	31.8	9.9	*8.9*	65.6	.....	.5	2,925
Average	**3**	.....	**29.4**	**9.4**	*8.5*	**61.7**	.....	**.4**	**2,780**
As purchased—									
Minimum	3	7.9	24.1	7.8	*7.2*	51.1	.....	.4	2,315
Maximum	3	13.5	27.5	8.5	*7.8*	60.4	.....	.4	2,695
Average	**3**	**11.2**	**26.1**	**8.3**	*7.5*	**54.8**	.....	**.4**	**2,465**
Side, not including lard and kidney:									
Edible portion— *c*									
Minimum	11	.....	29.4	7.1	*8.1*	44.0	.....	.4	2,060
Maximum	11	.....	43.1	11.0	*12.2*	64.4	.....	.7	2,880
Average	**11**	.....	**34.4**	**9.1**	*9.8*	**55.3**	.....	**.5**	**2,505**
As purchased—									
Minimum	11	8.2	26.6	6.4	*7.3*	38.8	.....	.4	1,815
Maximum	11	14.2	38.0	9.0	*10.8*	59.1	.....	.6	2,645
Average	**11**	**11.5**	**30.4**	**8.0**	*8.6*	**49.0**	.....	**.5**	**2,215**
Clear backs:									
Edible portion— *d*									
Minimum	8	.....	20.2	4.9	*5.6*	57.8	.....	.3	2,595
Maximum	8	.....	32.3	8.4	*9.4*	74.4	.....	.5	3,235
Average	**8**	.....	**25.1**	**6.4**	*6.9*	**6.76**	.....	**.4**	**2,970**
As purchased—									
Minimum	8	4.2	19.3	4.7	*4.8*	54.8	.....	.3	2,460
Maximum	8	7.1	30.6	8.0	*8.9*	70.9	.....	.5	3,080
Average	**8**	**5.7**	**23.7**	**6.0**	*6.4*	**63.8**	.....	**.4**	**2,805**
Clear bellies:									
Edible portion— *e*									
Minimum	8	.....	21.5	3.5	*4.3*	52.1	.....	.2	2,360
Maximum	8	.....	37.3	8.8	*10.0*	74.0	.....	.6	3,590
Average	**8**	.....	**31.4**	**6.9**	*7.8*	**60.4**	.....	**.4**	**2,675**
As purchased—									
Minimum	8	4.9	20.3	3.3	*4.0*	49.1	.....	.2	2,225
Maximum	8	8.6	35.2	8.3	*9.4*	69.8	.....	.6	3,005
Average	**8**	**6.2**	**29.5**	**6.5**	*7.3*	**56.6**	.....	**.4**	**2,510**
Back fat, as purchased:									
Minimum	3	.....	5.5	3.2	*2.0*	86.7	.....	.1	3,730
Maximum	3	.....	10.5	4.1	*2.7*	92.4	.....	.2	3,955
Average	**3**	.....	**7.7**	**3.6**	*2.3*	**89.9**	.....	**.1**	**3,860**
Belly fat, as purchased:									
Minimum	3	.....	11.0	3.9	*3.2*	78.6	.....	.2	3,430
Maximum	3	.....	16.7	6.1	*4.6*	85.6	.....	.2	3,685
Average	**3**	.....	**13.8**	**5.2**	*4.1*	**81.9**	.....	**.2**	**3,555**

a Eight samples contained an average of lecithin 0.51, gelatinoids 0.6, and "flesh bases" 0.9 per cent.
b Eight samples contained an average of lecithin 0.25, gelatinoids 0.8, and "flesh bases" 1.1 per cent.
c Eight samples contained an average of lecithin 0.35, gelatinoids 1, and "flesh bases" 1.5 per cent.
d Eight samples contained an average of lecithin 0.21, gelatinoids 0.6, and "flesh bases" 0.8 per cent.
e Eight samples contained an average of lecithin 0.18, gelatinoids 0.6, and "flesh bases" 0.9 per cent.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
PORK, FRESH—continued.									
		P. ct.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Ham fat, as purchased:									
Minimum	3	.....	8.3	3.1	*2.5*	87.2	.....	0.1	3,740
Maximum	3	.....	10.2	3.7	*3.3*	89.2	.....	.2	3,825
Average	**3**	.....	**9.1**	**3.5**	*2.7*	**88.0**	.....	**.2**	**3,780**
Jowl fat, as purchased:									
Minimum	3	.....	13.3	5.1	*4.3*	72.8	.....	.2	3,200
Maximum	3	.....	21.2	6.9	*5.7*	82.2	.....	.3	3,575
Average	**3**	.....	**16.0**	**5.9**	*5.0*	**78.8**	.....	**.2**	**3,435**
Feet:									
Edible portion—*a*									
Minimum	8	.....	50.7	8.3	*11.2*	17.4	.....	.4	1,090
Maximum	8	.....	61.3	19.2	*20.5*	31.5	.....	.9	1,630
Average	**8**	.....	**55.4**	**15.8**	*17.5*	**26.3**	.....	**.8**	**1,405**
As purchased—									
Minimum	8	65.6	8.7	2.4	*3.0*	3.7	.....	.1	235
Maximum	8	84.0	17.3	5.6	*5.8*	10.8	.....	.3	560
Average	**8**	**74.1**	**14.3**	**4.1**	*4.5*	**6.9**	.....	**.2**	**365**
Tails:									
Edible portion—*b*									
Minimum	8	.....	11.5	2.9	*3.6*	67.2	.....	.2	2,940
Maximum	8	.....	25.8	6.8	*7.2*	84.7	.....	.4	3,630
Average	**8**	.....	**17.4**	**4.8**	*5.2*	**77.1**	.....	**.3**	**3,340**
As purchased—									
Minimum	8	8.7	10.0	2.5	*3.2*	54.9	.....	.2	2,420
Maximum	8	19.8	21.8	5.5	*5.8*	74.2	.....	.3	3,200
Average	**8**	**13.3**	**15.0**	**4.1**	*4.5*	**66.9**	.....	**.3**	**2,900**
Trimmings:									
Edible portion—									
Minimum	8	.....	16.5	3.9	*4.3*	62.1	.....	.3	2,750
Maximum	8	.....	29.7	7.2	*7.9*	78.9	.....	.4	3,465
Average	**8**	.....	**23.3**	**5.4**	*6.2*	**70.2**	.....	**.3**	**3,060**
As purchased—									
Minimum	8	5.3	15.5	3.7	*4.0*	58.0	.....	.3	2,570
Maximum	8	10.4	27.8	6.7	*7.3*	74.2	.....	.4	3,200
Average	**8**	**7.4**	**21.6**	**5.0**	*5.7*	**65.0**	.....	**.3**	**2,835**
PORK ORGANS, ETC.									
Brains, as purchased	1	.....	75.8	11.7	*12.3*	10.3	.....	1.6	655
Heart, as purchased	1	.....	75.6	17.1	*17.1*	6.3	.....	1.0	585
Kidneys, as purchased:									
Minimum	2	.....	76.1	15.2	*15.2*	4.1	.....	1.2	455
Maximum	2	.....	79.5	15.9	*17.2*	5.5	.....	1.2	530
Average	**2**	.....	**77.8**	**15.5**	*16.2*	**4.8**	.....	**1.2**	**490**
Liver, as purchased	1	.....	71.4	21.3	*21.3*	4.5	1.4	1.4	615
Lungs, as purchased	1	.....	83.3	11.9	*11.8*	4.0	.....	.9	390
Marrow, as purchased:									
Minimum	6	.....	13.2	1.5	*2.2*	78.4	.....	.....	3,360
Maximum	6	.....	16.7	3.2	*5.8*	84.5	.....	(*c*)	4,095
Average	**6**	.....	**14.6**	**2.3**	*4.2*	**81.2**	.....	.....	**3,470**
Skin, as purchased:									
Minimum	7	.....	35.5	18.5	*27.4*	14.4	.....	.5	1,140
Maximum	7	.....	55.4	33.3	*33.5*	35.3	.....	.8	1,860
Average	**7**	.....	**46.3**	**26.4**	*30.4*	**22.7**	.....	**.6**	**1,450**
PORK, PICKLED, SALTED, AND SMOKED.									
Ham, smoked, lean:									
Edible portion—									
Minimum	3	.....	49.5	19.5	*19.8*	17.0	.....	5.4	1,080
Maximum	3	.....	57.4	20.2	*20.7*	24.4	.....	5.8	1,405
Average	**3**	.....	**53.5**	**19.8**	*20.2*	**20.8**	.....	**5.5**	**1,245**
As purchased—									
Minimum	3	8.4	45.3	16.7	*17.0*	14.5	.....	4.8	925
Maximum	3	14.3	49.2	18.5	*19.0*	22.3	.....	5.0	1,285
Average	**3**	**11.5**	**47.2**	**17.5**	*17.9*	**18.5**	.....	**4.9**	**1,105**

a Eight samples contained an average of lecithin 0.32, gelatinoids 3.5, and "flesh bases" 2 per cent.
b Eight samples contained an average of lecithin 0.20, gelatinoids 0.6, and "flesh bases" 0.6 per cent.
c Ash not determined.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
PORK, PICKLED, SALTED, AND SMOKED—cont'd.									
Ham, smoked, medium fat:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	14	.....	34.7	12.5	*11.8*	30.3	.....	2.7	1,690
Maximum	14	.....	45.6	22.9	*24.5*	44.7	.....	7.4	2,145
Average	**14**	.....	**40.3**	**16.3**	*16.1*	**38.8**	.....	**4.8**	**1,940**
As purchased—									
Minimum	14	4.5	27.3	10.2	*10.2*	24.5	.....	2.4	1,365
Maximum	14	28.4	42.5	21.9	*23.4*	39.9	.....	6.0	1,890
Average	**14**	**13.6**	**34.8**	**14.2**	*14.0*	**33.4**	.....	**4.2**	**1,675**
Ham, smoked, fat:									
Edible portion—									
Minimum	4	.....	22.4	12.0	*14.3*	42.0	.....	.6	2,135
Maximum	4	.....	34.9	19.5	*18.2*	56.8	.....	6.5	2,652
Average	**4**	.....	**27.9**	**14.8**	*16.1*	**52.3**	.....	**3.7**	**2,485**
As purchased—									
Minimum	2	2.0	22.0	11.4	*14.0*	51.9	.....	.5	2,400
Maximum	2	4.8	28.3	13.4	*14.5*	55.6	.....	6.4	2,595
Average	**2**	**3.4**	**25.2**	**12.4**	*14.2*	**53.7**	.....	**3.5**	**2,495**
Ham, smoked, all analyses:									
Edible portion	21	.....	39.8	16.5	*16.7*	38.8	.....	4.7	1,945
As purchased	19	12.2	35.8	14.5	*14.6*	33.2	.....	4.2	1,670
Ham skin, as purchased	1	.....	27.2	15.4	*16.0*	53.7	.....	3.1	2,555
Ham, smoked, boiled, as purchased:									
Minimum	2	.....	39.2	18.1	*18.2*	7.8	.....	5.6	740
Maximum	2	.....	63.4	22.2	*22.2*	37.0	.....	6.6	1,900
Average	**2**	.....	**51.3**	**20.2**	*20.2*	**22.4**	.....	**6.1**	**1,320**
Ham, smoked, fried, as purchased	1	.....	36.6	22.2	*24.4*	33.2	.....	5.8	1,815
Ham, boneless, raw:									
Edible portion—									
Minimum	4	.....	40.3	10.0	*11.4*	17.3	.....	4.4	1,052
Maximum	4	.....	55.9	17.3	*19 4*	38.9	.....	6.6	1,930
Average	**4**	.....	**50.1**	**14.9**	*15.4*	**28.5**	.....	**6.0**	**1,480**
As purchased—									
Minimum	4	2.2	38.1	9.7	*11.1*	16.9	.....	4.3	1,030
Maximum	4	5.6	54.7	16.9	*18.9*	36.7	.....	7.3	1,820
Average	**4**	*a* **3.3**	**48.5**	**14.3**	*14.9*	**27.5**	.....	**5.8**	**1,425**
Ham, luncheon, cooked:									
Edible portion—									
Minimum	2	.....	47.8	19.5	*22.8*	19.4	.....	5.0	1,290
Maximum	2	.....	50.5	25.5	*25.1*	22.7	.....	6.7	1,320
Average	**2**	.....	**49.2**	**22.5**	*24.0*	**21.0**	.....	**5.8**	**1,305**
As purchased—									
Minimum	2	1.5	46.5	19.0	*22.2*	19.1	.....	4.9	1,270
Maximum	2	2.8	49.7	25.1	*24.8*	22.0	.....	6.5	1,280
Average	**2**	*a* **2.1**	**48.1**	**22.1**	*23.5*	**20.6**	.....	**5.7**	**1,280**
Shoulder, smoked, medium fat:									
Edible portion—									
Minimum	3	.....	41.5	14.2	*14.6*	28.8	.....	5.5	1,480
Maximum	3	.....	49.6	17.1	*16.5*	35.0	.....	8.2	1,780
Average	**3**	.....	**45.0**	**15.9**	*15.8*	**32.5**	.....	**6.7**	**1,665**
As purchased—									
Minimum	3	17.4	34.3	11.7	*11.7*	23.7	.....	4.5	1,220
Maximum	3	19.4	40.8	14.1	*13.6*	28.2	.....	6.8	1,440
Average	**3**	**18.2**	**36.8**	**13.0**	*12.9*	**26.6**	.....	**5.5**	**1,365**
Shoulder, smoked, fat:									
Edible portion—									
Minimum	2	.....	22.6	14.2	*14.5*	49.0	.....	4.7	2,365
Maximum	2	.....	30.4	15.9	*14.9*	58.2	.....	5.7	2,720
Average	**2**	.....	**26.5**	**15.1**	*14.7*	**53.6**	.....	**5.2**	**2,545**
As purchased—									
Minimum	2	14.1	16.7	10.5	*10.7*	42.1	.....	3.5	2,015
Maximum	2	26.0	26.1	13.7	*12.8*	43.1	.....	4.9	2,030
Average	**2**	**20.0**	**21.4**	**12.1**	*11.8*	**42.6**	.....	**4.2**	**2,020**
Shoulder, smoked, all analyses:									
Edible portion	5	.....	37.6	15.5	*15.3*	41.0	.....	6.1	2,020
As purchased	5	18.9	30.7	12.6	*12.4*	33.0	.....	5.0	1,625
Pigs' tongues, pickled:									
Edible portion—									
Minimum	2	.....	51.8	17.0	*17.6*	16.5	.....	.5	1,015
Maximum	2	.....	65.4	18.3	*18.4*	23.1	.....	6.7	1,310
Average	**2**	.....	**58.6**	**17.7**	*18.0*	**19.8**	.....	**3.6**	**1,165**

a Refuse, case.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
PORK, PICKLED, SALTED, AND SMOKED—cont'd.									
Pigs' tongues, pickled—Continued.									
As purchased—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct*	*Cals.*
Minimum	2	1.2	49.1	16.8	*17.4*	16.3	.....	6.5	1,000
Maximum	2	5.2	64.6	17.3	*17.5*	21.9	.....	6.3	1,245
Average	**2**	**3.2**	**56.8**	**17.1**	*17.5*	**19.1**	.....	**3.4**	**1,125**
Pigs' feet, pickled:									
Edible portion—									
Minimum	2	.....	61.7	12.8	*12.9*	11.5	.....	.9	725
Maximum	2	.....	74.7	19.8	*19.2*	18.1	.....	1.0	1,130
Average	**2**	.....	**68.2**	**16.3**	*16.1*	**14.8**	.....	**.9**	**930**
As purchased—									
Minimum	2	26.7	34.4	9.4	*9.4*	8.5	.....	.5	535
Maximum	2	44.3	54.7	11.0	*10.7*	10.1	.....	.7	630
Average	**2**	**35.5**	**44.6**	**10.2**	*10.0*	**9.3**	.....	**.6**	**585**
Dry-salted backs:									
Edible portion—									
Minimum	2	.....	17.0	6.7	*5.7*	71.6	.....	2.2	3,180
Maximum	2	.....	17.6	8.7	*8.6*	73.8	.....	3.5	3,240
Average	**2**	.....	**17.3**	**7.7**	*7.2*	**72.7**	.....	**2.8**	**3,210**
As purchased—									
Minimum	2	7.0	15.8	6.2	*5.3*	65.0	.....	2.1	2,890
Maximum	2	9.2	15.9	7.9	*7.8*	68.6	.....	3.3	3,010
Average	**2**	**8.1**	**15.9**	**7.1**	*6.5*	**66.8**	.....	**2.7**	**2,950**
Dry-salted bellies:									
Edible portion—									
Minimum	2	.....	17.2	8.3	*6.7*	71.5	.....	3.2	3,170
Maximum	2	.....	18.1	8.5	*6.8*	72.9	.....	3.6	3,235
Average	**2**	.....	**17.7**	**8.4**	*6.7*	**72.2**	.....	**3.4**	**3,200**
As purchased—									
Minimum	2	7.1	15.6	7.7	*6.0*	66.1	.....	3.0	2,930
Maximum	2	9.3	16.8	7.7	*6.3*	66.4	.....	3.4	2,945
Average	**2**	**8.2**	**16.2**	**7.7**	*6.2*	**66.2**	.....	**3.2**	**2,935**
Salt pork, clear fat, as purchased:									
Minimum	7	.....	.3	.2	*.6*	80.3	.....	2.6	3,505
Maximum	7	.....	12.2	5.0	*4.5*	94.1	.....	5.0	3,975
Average	**7**	.....	**7.9**	**1.9**	*2.0*	**86.2**	.....	**3.9**	**3,670**
Salt pork, lean ends:									
Edible portion—									
Minimum	4	.....	18.2	7.7	*6.6*	62.3	.....	5.3	2,810
Maximum	4	.....	22.2	9.8	*9.4*	69.8	.....	6.1	3,100
Average	**4**	.....	**19.9**	**8.4**	*7.3*	**67.1**	.....	**5.7**	**2,985**
As purchased—									
Minimum	4	9.0	16.2	6.7	*5.8*	53.6	.....	4.8	2,415
Maximum	4	14.0	19.1	8.4	*8.0*	63.5	.....	5.5	2,805
Average	**4**	**11.2**	**17.6**	**7.4**	*6.5*	**59.6**	.....	**5.1**	**2,655**
Bacon, smoked, lean:									
Edible portion—									
Minimum	2	.....	30.8	13.4	*12.9*	40.0	.....	5.7	1,940
Maximum	2	.....	32.7	17.6	*16.4*	45.2	.....	16.3	2,435
Average	**2**	.....	**31.8**	**15.5**	*14.6*	**42.6**	.....	**11.0**	**2,085**
As purchased—									
Minimum	2	9.6	23.3	10.1	*9.8*	30.2	.....	5.1	1,460
Maximum	2	24.4	29.6	15.9	*14.9*	40.8	.....	12.3	2,020
Average	**2**	**17.0**	**26.5**	**13.0**	*12.3*	**35.5**	.....	**8.7**	**1,740**
Bacon, smoked, medium fat:									
Edible portion—									
Minimum	17	.....	7.7	6.3	*6.6*	57.4	.....	2.7	2,665
Maximum	17	.....	26.9	18.0	*13.4*	79.7	.....	7.9	3,480
Average	**17**	.....	**18.8**	**9.9**	*9.4*	**67.4**	.....	**4.4**	**3,030**
As purchased—									
Minimum	17	2.9	7.1	5.7	*6.0*	52.7	.....	2.4	2,425
Maximum	17	13.0	24.8	15.7	*12.1*	72.8	.....	7.2	3,180
Average	**17**	**7.7**	**17.4**	**9.1**	*8.6*	**62.2**	.....	**4.1**	**2,795**
Bacon, smoked, all analyses:									
Edible portion	19	.....	20.2	10.5	*9.9*	64.8	.....	5.1	2,930
As purchased	19	8.7	18.4	9.5	*9.0*	59.4	.....	4.5	2,685
Ribs, cooked, as purchased	1	.....	33.6	24.8	*26.6*	37.6	.....	2.2	2,050
Steak, cooked, as purchased	1	.....	33.2	.....	*19.9*	45.4	.....	1.5	2,285
PORK, CANNED.									
Brawn, boars' brains, as purchased:									
Minimum	2	.....	44.3	20.1	*18.2*	12.9	.....	4.3	1,110
Maximum	2	.....	53.7	30.3	*28.5*	33.2	.....	4.9	1,775
Average	**2**	.....	**49.0**	**25.2**	*23.4*	**23.0**	.....	**4.6**	**1,440**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
PORK, CANNED—continued.									
Boars' heads, as purchased:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	50.5	19.8	*17.8*	19.3	.....	2.8	1,180
Maximum	2	.....	60.1	21.6	*20.7*	25.0	.....	3.8	1,455
Average	**2**	.....	**55.3**	**20.7**	*19.2*	**22.2**	.....	**3.3**	**1,320**
Ham, deviled, as purchased:									
Minimum	6	.....	38.4	16.5	*16.9*	29.5	.....	2.3	1,610
Maximum	6	.....	49.4	21.4	*20.5*	38.9	.....	4.4	1,975
Average	**6**	.....	**44.1**	**19.0**	*18.5*	**34.1**	.....	**3.3**	**1,790**
SAUSAGE. *a*									
Arles:									
Edible portion	1	.....	17.2	26.8	*24.9*	50.6	.....	7.3	2,635
As purchased	1	5.2	16.3	25.4	*23.6*	48.0	.....	6.9	2,495
Banquet:									
Edible portion	1	.....	62.7	18.3	*17.9*	15.7	.....	3.7	1,005
As purchased	1	1.6	61.7	18.0	*17.7*	15.4	.....	3.6	985
Bologna:									
Edible portion—									
Minimum	8	.....	53.5	15.3	*15.0*	11.1	0.2	3.0	820
Maximum	8	.....	67.0	21.2	*20.7*	24.0	.5	5.2	1,320
Average	**8**	.....	**60.0**	**18.7**	*18.4*	**17.6**	**.3**	**3.7**	**1,095**
As purchased—									
Minimum	4	2.4	51.6	14.9	*14.6*	13.9	.....	3.0	925
Maximum	4	4.5	59.9	20.5	*20.0*	23.4	.....	5.0	1,270
Average	**4**	**3.3**	**55.2**	**18.2**	*18.0*	**19.7**	.....	**3.8**	**1,170**
Farmer:									
Edible portion	1	.....	23.2	29.0	*27.2*	42.0	.....	7.6	2,310
As purchased	1	3.9	22.2	27.9	*26.2*	40.4	.....	7.3	2,225
Frankfort, as purchased:									
Minimum	8	.....	40.3	14.6	*15.4*	14.8	2.4	.7	985
Maximum	8	.....	64.8	26.9	*26.9*	25.9	8.6	8.1	1,595
Average	**8**	.....	**57.2**	**19.6**	*19.7*	**18.6**	**1.1**	**3.4**	**1,170**
Holsteiner:									
Edible portion	1	.....	25.6	29.4	*29.4*	37.3	3.4	4.3	2,220
As purchased	1	2.2	25.1	28.7	*28.7*	36.5	3.3	4.2	2,135
Lyons, pure ham:									
Edible portion	1	.....	32.5	32.3	*32.3*	27.2	.....	8.0	1,750
As purchased	1	10.0	29.2	29.1	*29.1*	24.5	.....	7.2	1,575
Pork, as purchased:									
Minimum	11	.....	25.7	7.3	*7.3*	28.2	.....	1.0	1,485
Maximum	11	.....	54.4	19.0	*16.9*	56.8	8.6	2.7	2,635
Average	**11**	.....	**39.8**	**13.0**	*12.7*	**44.2**	**1.1**	**2.2**	**2,125**
Pork sausage meat, as purchased	1	.....	46.2	17.4	*17.9*	32.5	.....	3.4	1,695
Pork and beef chopped together, as purchased	1	.....	55.4	19.4	*19.5*	24.1	.....	1.0	1,380
Salmi:									
Edible portion—									
Minimum	2	.....	28.6	23.4	*22.5*	37.8	.....	6.9	2,055
Maximum	2	.....	32.4	24.9	*22.7*	42.0	.....	7.1	2,205
Average	**2**	.....	**30.5**	**24.1**	*22.6*	**39.9**	.....	**7.0**	**2,130**
As purchased—									
Minimum	2	7.5	26.5	21.6	*20.2*	33.6	.....	6.4	1,830
Maximum	2	11.0	28.8	22.1	*20.8*	38.8	.....	6.4	2,040
Average	**2**	**9.3**	**27.6**	**21.8**	*20.5*	**36.2**	.....	**6.4**	**1,935**
Summer:									
Edible portion—									
Minimum	3	.....	20.0	23.5	*22.8*	43.0	.....	7.3	2,280
Maximum	3	.....	25.0	29.4	*26.6*	45.7	.....	8.0	2,480
Average	**3**	.....	**23.2**	**26.0**	*24.6*	**44.5**	.....	**7.7**	**2,360**
As purchased—									
Minimum	2	5.2	18.2	22.3	*21.6*	41.6	.....	6.9	2,215
Maximum	2	8.9	23.7	26.8	*24.3*	42.6	.....	7.0	2,245
Average	**2**	**7.0**	**20.9**	**24.5**	*23.0*	**42.1**	.....	**7.0**	**2,230**
Tongue, as purchased	1	.....	46.4	20.1	*17.3*	33.1	.....	3.2	1,770
Wienerwurst, as purchased	1	.....	43.9	28.0	.....	22.1	1.6	4.4	1,485
SAUSAGE, CANNED.									
Beef, as purchased	1	.....	59.6	17.9	*17.8*	20.6	.....	2.0	1,200
Bologna, Italian, as purchased	1	.....	42.6	24.9	*23.2*	27.8	.....	6.4	1,635

a In some cases the sum of the percentages of water, protein, fat, and ash in sausage does not make 100. In such cases the difference is estimated as carbohydrates. There are, however, no tests showing the presence of these, and it may be more nearly correct to give no value for carbohydrates.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
SAUSAGE, CANNED—continued.		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Frankfort, as purchased	1	.....	72.7	14.9	*14.6*	9.9	.....	2.8	695
Oxford, as purchased	1	.....	28.9	9.9	*9.9*	58.5	0.6	2.1	2,665
Pork:									
Edible portion	1	.....	56.6	16.6	*16.6*	24.8	.....	2.0	1,355
As purchased	1	*a*12.6	49.5	14.5	*14.5*	21.6	.....	1.8	1,180
POULTRY AND GAME, FRESH.									
Chicken, broilers:									
Edible portion—									
Minimum	3	.....	72.2	19.0	*19.0*	1.6	.....	1.0	440
Maximum	3	.....	76.3	25.4	*24.5*	4.0	.....	1.4	550
Average	**3**	.....	**74.8**	**21.5**	*21.6*	**2.5**	.....	**1.1**	**505**
As purchased—									
Minimum	3	31.4	44.6	9.0	*8.5*	1.1	.....	.5	245
Maximum	3	55.1	52.4	15.7	*15.1*	1.8	.....	.9	365
Average	**3**	**41.6**	**43.7**	**12.8**	*12.6*	**1.4**	.....	**.7**	**295**
Fowls:									
Edible portion—									
Minimum	26	.....	54.1	15.5	*14.8*	9.7	.....	.8	770
Maximum	26	.....	70.7	21.8	*21.7*	28.3	.....	1.5	1,520
Average	**26**	.....	**63.7**	**19.3**	*19.0*	**16.3**	.....	**1.0**	**1,045**
As purchased—									
Minimum	26	18.0	38.3	11.5	*11.0*	6.9	.....	.5	515
Maximum	26	42.7	53.7	16.0	*15.8*	21.5	.....	1.1	1,155
Average	**26**	**25.9**	**47.1**	**13.7**	*14.0*	**12.3**	.....	**.7**	**775**
Goose, young:									
Edible portion	1	.....	46.7	16.3	*16.3*	36.2	.....	.8	1,830
As purchased	1	17.6	38.5	13.4	*13.4*	29.8	.....	.7	1,505
Turkey:									
Edible portion—									
Minimum	3	.....	49.5	19.0	*18.9*	8.7	.....	.9	830
Maximum	3	.....	66.1	24.9	*23.9*	30.7	.....	1.3	1,650
Average	**3**	.....	**55.5**	**21.1**	*20.6*	**22.9**	.....	**1.0**	**1,360**
As purchased—									
Minimum	3	17.1	41.1	15.8	*15.5*	5.9	.....	.7	565
Maximum	3	32.4	44.7	16.8	*16.1*	25.5	.....	.9	1,370
Average	**3**	**22.7**	**42.4**	**16.1**	*15.7*	**18.4**	.....	**.8**	**1,075**
Chicken gizzard, as purchased	1	.....	72.5	24.7	*24.7*	1.4	.....	1.4	520
Chicken heart, as purchased	1	.....	72.0	20.7	*21.1*	5.5	.....	1.4	615
Chicken liver, as purchased	1	.....	69.3	22.4	.....	4.2	2.4	1.7	640
Goose gizzard	1	.....	73.8	19.6	*19.4*	5.8	.....	1.0	610
Goose liver, as purchased	1	.....	62.6	16.6	.....	15.9	3.7	1.2	1,050
Turkey gizzard, as purchased	1	.....	62.7	20.5	.....	14.5	1.2	1.1	1,015
Turkey heart, as purchased	1	.....	68.6	16.8	*17.2*	13.2	.....	1.0	870
Turkey liver, as purchased	1	.....	69.6	22.9	.....	5.2	.6	1.7	655
POULTRY AND GAME, COOKED.									
Capon:									
Edible portion	1	.....	59.9	27.0	*27.3*	11.5	.....	1.3	985
As purchased	1	10.4	53.6	24.2	*24.5*	10.3	.....	1.2	885
Capon, with stuffing:									
Edible portion	1	.....	62.1	21.8	.....	10.9	3.8	1.4	935
As purchased	1	7.7	57.2	20.1	.....	10.3	3.5	1.2	875
Chicken, fricasseed, edible portion	1	.....	67.5	17.6	.....	11.5	2.4	1.0	855
Turkey, roast, edible portion	1	.....	52.0	27.8	*28.4*	18.4	.....	1.2	1,295
Turkey, roast, light and dark meat and stuffing, edible portion	1	.....	65.0	.....	*17.1*	10.8	5.5	1.6	870
POULTRY AND GAME, CANNED.									
Chicken, sandwich, as purchased	1	.....	46.9	20.8	*20.5*	30.0	.....	2.6	1,655
Turkey, sandwich, as purchased	1	.....	47.4	20.7	*20.7*	29.2	.....	2.7	1,615
Plover, roast, as purchased	1	.....	57.7	22.4	.....	10.2	7.6	2.1	985
Quail, as purchased	1	.....	66.9	21.8	.....	8.0	1.7	1.6	775

a Refuse liquid.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
FISH, FRESH. *a*									
Alewife, whole:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	73.0	19.0	*18.8*	3.8	.....	1.4	515
Maximum	2	.....	75.9	19.7	*19.5*	6 0	.....	1.5	620
Average	**2**	.....	**74.4**	**19.4**	*19.2*	**4.9**	.....	**1.5**	**570**
As purchased—									
Minimum	2	49.4	36.9	9.6	*9.5*	1.9	.....	.8	260
Maximum	2	49.5	38.3	10.0	*9.9*	3.0	.....	.8	315
Average	**2**	**49.5**	**37.6**	**9.8**	*9.7*	**2.4**	.....	**.8**	**285**
Bass, black, whole:									
Edible portion—									
Minimum	2	.....	74.8	19.4	*19.2*	1.0	.....	1.2	405
Maximum	2	.....	78.6	21.7	*21.5*	2.5	.....	1.2	510
Average	**2**	.....	**76.7**	**20.6**	*20.4*	**1.7**	.....	**1.2**	**455**
As purchased—									
Minimum	2	53.6	34.6	8.5	*8.5*	.4	.....	.5	175
Maximum	2	56.0	34.7	10.1	*10.0*	1.1	.....	.6	235
Average	**2**	**54.8**	**34.6**	**9.3**	*9.3*	**.8**	.....	**.5**	**205**
Bass, red, whole:									
Edible portion	1	.....	81.6	16.9	*16.7*	.5	.....	1.2	335
As purchased	1	63.5	29.8	6.2	*6.1*	.2	.....	.4	125
Bass, sea, whole:									
Edible portion	1	.....	79.3	19.8	*18.8*	.5	.....	1.4	390
As purchased	1	56.1	34.8	8.7	*8.3*	.2	.....	.6	170

a A considerable number of determinations of phosphorus, sulphur, and chlorin have been made in the flesh of fresh fish. These are recorded in the following table in terms of phosphoric anhydrid (P_2O_5), sulphuric anhydrid (SO_3), and chlorin (Cl), and in percentages of the total weight of "edible portion" or flesh:

Phosphoric anhydrid, sulphuric anhydrid, and chlorin in samples of fresh fish.

Kind of fish.	Phosphoric anhydrid.		Sulphuric anhydrid.		Chlorin.	
	Number of determinations.	Average.	Number of determinations.	Average.	Number of determinations.	Average.
		Per cent.		*Per cent.*		*Per cent.*
Alewife	1	0.50	.....	.....	.....	.....
Bass:						
Black	1	.44	1	0.89	.....	.....
Striped	2	.48	1	.47	.....	.....
Blackfish	1	.52	1	.46	1	0.24
Bluefish	1	.62	.....	.....	.....	.....
Cod	2	.45	.....	.....	.....	.....
Eels, salt water	1	.51	.....	.....	.....	.....
Flounder	2	.40	2	.42	.....	.....
Haddock	2	.47	1	.41	.....	.....
Halibut	2	.44	1	.49	.....	.....
Herring	1	.55	1	.55	.....	.....
Mackerel	4	.56	2	.47	.....	.....
Muskellunge	1	.52	1	.37	.....	.....
Perch:						
White	2	.44	2	.65	.....	.....
Pike	1	.46	1	.90	.....	.....
Porgy	2	.59	1	.52	.....	.....
Red snapper	2	.47	2	.47	.....	.....
Salmon	2	.57	1	.61	.....	.....
Landlocked	2	.51	2	.40	.....	.....
California	1	.69	1	.43	.....	.....
Shad	2	.60	1	.52	.....	.....
Sheepshead	1	.45	1	.48	.....	.....
Smelt	1	.81	1	.55	.....	.....
Spanish mackerel	1	.60	1	.58	.....	.....
Trout, brook	1	.61	1	.48	.....	.....
Turbot	1	.48	1	.32	.....	.....
Whitefish	1	.71	1	.41	.....	.....

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
FISH, FRESH—continued.									
Bass, striped, whole:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	6	.....	75.8	17.1	*16.9*	1.6	.....	0.9	405
Maximum	6	.....	79.6	19.5	*19.3*	4.6	.....	1.4	530
Average	**6**	.....	**77.7**	**18.6**	*18.3*	**2.8**	.....	**1.2**	**465**
As purchased—									
Minimum	5	48.6	32.5	7.4	*7.2*	.7	.....	.5	175
Maximum	5	57.1	39.7	9.8	*9.7*	1.6	.....	.6	255
Average	**5**	**55.0**	**35.1**	**8.4**	*8.3*	**1.1**	.....	**.5**	**200**
Bass, striped, entrails removed, as purchased.	1	51.2	37.4	8.8	*8.7*	2.2	.....	.5	255
Blackfish, whole:									
Edible portion—									
Minimum	4	.....	76.9	17.6	*17.4*	.6	.....	.6	350
Maximum	4	.....	81.4	19.3	*19.0*	2.8	.....	1.4	475
Average	**4**	.....	**79.1**	**18.7**	*18.5*	**1.3**	.....	**1.1**	**405**
As purchased—									
Minimum	2	56.2	29.2	6.3	*6.3*	.2	.....	.2	125
Maximum	2	64.1	33.7	8.5	*8.3*	1.2	.....	.6	205
Average	**2**	**60.2**	**31.4**	**7.4**	*7.3*	**.7**	.....	**.4**	**165**
Blackfish, entrails removed, as purchased:									
Minimum	2	53.6	33.5	8.0	*7.9*	.4	.....	.4	125
Maximum	2	57.8	36.4	8.8	*8.7*	.7	.....	.6	205
Average	**2**	**55.7**	**35.0**	**8.4**	*8.3*	**.5**	.....	**.5**	**175**
Bluefish, entrails removed:									
Edible portion	1	.....	78.5	19.4	*19.0*	1.2	.....	1.3	410
As purchased	1	48.6	40.3	10.0	*9.8*	.6	.....	.7	210
Buffalo fish, entrails removed:									
Edible portion	1	.....	78.6	18.0	*17.9*	2.3	.....	1.2	430
As purchased	1	52.5	37.3	8.5	*8.5*	1.1	.....	.6	205
Butter-fish, whole:									
Edible portion	1	.....	70.0	18.0	*17.8*	11.0	.....	1.2	800
As purchased	1	42.8	40.1	10.3	*10.2*	6.3	.....	.6	460
Catfish:									
Edible portion	1	.....	64.1	14.4	*14.4*	20.6	.....	.9	1,135
As purchased	1	19.4	51.7	11.6	*11.6*	16.6	.....	.7	915
Ciscoe, whole:									
Edible portion—									
Minimum	3	.....	72.3	17.7	*17.6*	3.5	.....	.9	505
Maximum	3	.....	76.1	19.3	*19.1*	9.2	.....	1.3	715
Average	**3**	.....	**74.0**	**18.5**	*18.1*	**6.8**	.....	**1.1**	**630**
As purchased	1	42.7	43.6	11.1	*11.0*	2.0	.....	.7	290
Ciscoe, entrails removed, as purchased:									
Minimum	2	6.5	62.4	15.3	*15.4*	7.2	.....	.8	615
Maximum	2	13.7	68.8	17.2	*16.5*	7.8	.....	1.0	625
Average	**2**	**10.1**	**65.6**	**16.3**	*15.9*	**7.5**	.....	**.9**	**620**
Cod, whole:									
Edible portion—									
Minimum	5	.....	80.7	15.5	*14.9*	.3	.....	1.0	300
Maximum	5	.....	83.5	18.3	*17.6*	.5	.....	1.4	370
Average	**5**	.....	**82.6**	**16.5**	*15.8*	**.4**	.....	**1.2**	**325**
As purchased—									
Minimum	2	48.5	35.1	8.0	*7.7*	.1	.....	.6	155
Maximum	2	56.5	42.3	8.7	*8.3*	.3	.....	.6	175
Average	**2**	**52.5**	**38.7**	**8.4**	*8.0*	**.2**	.....	**.6**	**165**
Cod, dressed, as purchased:									
Minimum	3	25.5	55.3	10.3	*9.9*	.2	.....	.8	200
Maximum	3	33.7	62.1	11.8	*11.4*	.3	.....	.9	230
Average	**3**	**29.9**	**58.5**	**11.1**	*10.6*	**.2**	.....	**.8**	**215**
Cod, sections, edible portion:									
Minimum	3	.....	81.8	15.6	*15.0*	.1	.....	.8	300
Maximum	3	.....	83.5	17.7	*17.2*	.5	.....	1.0	335
Average	**3**	.....	**82.5**	**16.7**	*16.3*	**.3**	.....	**.9**	**325**
Cod, steaks:									
Edible portion	1	.....	79.7	18.7	*18.6*	.5	.....	1.2	370
As purchased	1	9.2	72.4	17.0	*16.9*	.5	.....	1.0	335
Cusk, entrails removed:									
Edible portion	1	.....	82.0	17.0	*16.9*	.2	.....	.9	325
As purchased	1	40.3	49.0	10.1	*10.1*	.1	.....	.5	190
Eels, salt water, head, skin, and entrails removed:									
Edible portion—									
Minimum	2	.....	69.8	17.8	*17.6*	7.9	.....	.9	665
Maximum	2	.....	73.4	19.3	*19.0*	10.3	.....	1.1	795
Average	**2**	.....	**71.6**	**18.6**	*18.3*	**9.1**	.....	**1.0**	**730**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
FISH, FRESH—continued.									
Eel, salt water, head, skin, and entrails removed—Continued.									
As purchased—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	19.0	54.9	14.4	*14.3*	6.4	.....	0.7	540
Maximum	2	21.4	59.4	15.2	*14.9*	8.1	.....	.9	625
Average	**2**	**20.2**	**57.2**	**14.8**	*14.6*	**7.2**	.....	**.8**	**580**
Flounder, whole:									
Edible portion—									
Minimum	3	.....	83.4	13.3	*12.9*	.4	.....	1.2	280
Maximum	3	.....	85.0	14.9	*14.7*	.8	.....	1.3	305
Average	**3**	.....	**84.2**	**14.2**	*13.9*	**.6**	.....	**1.3**	**290**
As purchased—									
Minimum	2	56.2	28.2	4.4	*4.2*	.2	.....	.5	95
Maximum	2	66.8	37.0	6.3	*6.1*	.3	.....	.5	130
Average	**2**	**61.5**	**32.6**	**5.4**	*5.1*	**.3**	.....	**.5**	**115**
Flounder, entrails removed, as purchased	1	57.0	35.8	6.4	*6.3*	.3	.....	.6	1:0
Haddock, entrails removed:									
Edible portion—									
Minimum	4	.....	80.3	16.3	*15.9*	.1	.....	1.0	315
Maximum	4	.....	82.6	18.6	*18.4*	.4	.....	1.6	355
Average	**4**	.....	**81.7**	**17.2**	*16.8*	**.3**	.....	**1.2**	**335**
As purchased—									
Minimum	4	48.0	38.5	8.0	*7.8*	.1	.....	.5	155
Maximum	4	52.9	42.9	9.0	*8.9*	.2	.....	.8	170
Average	**4**	**51.0**	**40.0**	**8.4**	*8.2*	**.2**	.....	**.6**	**165**
Hake, entrails removed:									
Edible portion	1	.....	83.1	15.4	*15.2*	.7	.....	1.0	315
As purchased	1	52.5	39.5	7.3	*7.2*	.3	.....	.5	150
Halibut, steaks or sections:									
Edible portion—									
Minimum	3	.....	70.1	17.5	*17.5*	2.2	.....	.9	420
Maximum	3	.....	79.2	19.7	*19.4*	10.6	.....	1.1	790
Average	**3**	.....	**75.4**	**18.6**	*18.4*	**5.2**	.....	**1.0**	**565**
As purchased—									
Minimum	3	11.2	60.9	13.5	*13.4*	1.7	.....	.7	325
Maximum	3	23.1	62.6	16.4	*16.1*	9.4	.....	1.0	700
Average	**3**	**17.7**	**61.9**	**15.3**	*15.1*	**4.4**	.....	**.9**	**470**
Herring, whole:									
Edible portion—									
Minimum	2	.....	69.0	19.1	*18.5*	3.2	.....	1.5	505
Maximum	2	.....	76.0	19.8	*19.2*	11.0	.....	1.6	820
Average	**2**	.....	**72.5**	**19.5**	*18.9*	**7.1**	.....	**1.5**	**660**
As purchased—									
Minimum	2	39.3	37.3	10.3	*10.0*	1.9	.....	.8	305
Maximum	2	46.0	46.1	12.0	*11.7*	5.9	.....	1.0	440
Average	**2**	**42.6**	**41.7**	**11.2**	*10.9*	**3.9**	.....	**.9**	**375**
Kingfish, whole:									
Edible portion	1	.....	79.2	18.9	*18.7*	.9	.....	1.2	390
As purchased	1	56.6	34.4	8.2	*8.1*	.4	.....	.5	170
Lamprey, whole:									
Edible portion	1	.....	71.1	15.0	*14.9*	13.3	.....	.7	840
As purchased	1	45.8	38.5	8.1	*8.1*	7.2	.....	.4	455
Mackerel, whole:									
Edible portion—									
Minimum	6	.....	64.0	17.5	*17.5*	2.2	.....	1.0	430
Maximum	6	.....	78.7	19.5	*19.2*	16.3	.....	1.5	1,045
Average	**6**	.....	**73.4**	**18.7**	*18.3*	**7.1**	.....	**1.2**	**645**
As purchased—									
Minimum	5	33.8	35.8	8.4	*8.4*	1.4	.....	.6	265
Maximum	5	51.8	48.5	12.6	*12.1*	10.7	.....	1.0	685
Average	**5**	**44.7**	**40.4**	**10.2**	*10.0*	**4.2**	.....	**.7**	**365**
Mackerel, entrails removed, as purchased	1	40.7	43.7	11.6	*11.4*	3.5	.....	.7	365
Mullet, whole:									
Edible portion	1	.....	74.9	19.5	*19.3*	4.6	.....	1.2	555
As purchased	1	57.9	31.5	8.2	*8.1*	2.0	.....	.5	235
Muskellunge, whole:									
Edible portion	1	.....	76.3	20.2	*19.6*	2.5	.....	1.6	480
As purchased	1	49.2	38.7	10.2	*10.0*	1.3	.....	.8	245
Perch, white, whole:									
Edible portion—									
Minimum	2	.....	75.6	18.0	*17.7*	2.5	.....	1.1	490
Maximum	2	.....	75.8	20.6	*20.4*	5.6	.....	1.3	570
Average	**2**	.....	**75.7**	**19.3**	*19.1*	**4.0**	.....	**1.2**	**530**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
FISH, FRESH—continued.									
Perch, white, whole—Continued.									
As purchased—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	61.8	27.8	6.6	*6.5*	1.0	.....	0.4	190
Maximum	2	63.2	28.9	7.9	*7.8*	2.1	.....	.5	210
Average	**2**	**62.5**	**28.4**	**7.3**	*7.2*	**1.5**	.....	**.4**	**200**
Perch, pike (wall-eyed pike):									
Edible portion	1	.....	79.7	18.6	*18.4*	.5	.....	1.4	365
As purchased	1	57.3	34.0	7.9	*7.9*	.2	.....	.6	155
Perch, yellow, whole:									
Edible portion—									
Minimum	2	.....	78.1	17.8	*17.9*	.6	.....	1.1	355
Maximum	2	.....	80.4	19.7	*19.5*	1.1	.....	1.3	410
Average	**2**	.....	**79.3**	**18.7**	*18.7*	**.8**	.....	**1.2**	**380**
As purchased	1	62.7	30.0	6.6	*6.7*	.2	.....	.4	130
Perch, yellow, dressed, as purchased	1	35.1	50.7	12.8	*12.6*	.7	.....	.9	265
Pickerel, pike, whole:									
Edible portion—									
Minimum	3	.....	79.5	18.4	*18.4*	.5	.....	1.1	365
Maximum	3	.....	79.9	19.0	*18.9*	.6	.....	1.2	375
Average	**3**	.....	**79.8**	**18.7**	*18.6*	**.5**	.....	**1.1**	**370**
As purchased—									
Minimum	2	45.4	40.8	9.8	*9.7*	.2	.....	.6	190
Maximum	2	48.7	43.6	10.0	*10.0*	.3	.....	.7	200
Average	**2**	**47.1**	**42.2**	**9.9**	*9.9*	**.2**	.....	**.6**	**190**
Pickerel, pike, entrails removed, as purchased	1	42.7	45.7	10.7	*10.7*	.3	.....	.6	210
Pike, gray, whole:									
Edible portion	1	.....	80.8	17.9	*17.3*	.8	.....	1.1	365
As purchased	1	63.2	29.7	6.6	*6.4*	.3	.....	.4	135
Pollock, dressed:									
Edible portion	1	.....	76.0	21.6	*21.7*	.8	.....	1.5	435
As purchased	1	28.5	54.3	15.4	*15.5*	.6	.....	1.1	310
Pompano, whole:									
Edible portion—									
Minimum	2	.....	67.4	18.4	*18.1*	1.6	.....	1.0	425
Maximum	2	.....	78.2	19.3	*19.2*	13.5	.....	1.0	910
Average	**2**	.....	**72.8**	**18.8**	*18.7*	**7.5**	.....	**1.0**	**665**
As purchased—									
Minimum	2	42.4	38.8	9.9	*9.9*	.8	.....	.5	220
Maximum	2	48.6	40.2	10.6	*10.5*	7.8	.....	.5	525
Average	**2**	**45.5**	**39.5**	**10.3**	*10.2*	**4.3**	.....	**.5**	**375**
Porgy, whole:									
Edible portion—									
Minimum	3	.....	72.0	17.4	*17.4*	1.5	.....	1.3	385
Maximum	3	.....	79.7	19.4	*19.3*	7.9	.....	1.4	685
Average	**3**	.....	**75.0**	**18.6**	*18.5*	**5.1**	.....	**1.4**	**560**
As purchased—									
Minimum	3	57.3	27.8	6.1	*6.1*	.5	.....	.5	135
Maximum	3	65.1	31.1	8.2	*8.2*	3.4	.....	.6	295
Average	**3**	**60.0**	**29.9**	**7.4**	*7.4*	**2.1**	.....	**.6**	**225**
Red grouper, entrails removed:									
Edible portion—									
Minimum	2	.....	79.0	18.7	*18.4*	.5	.....	1.1	370
Maximum	2	.....	79.9	19.8	*19.2*	.7	.....	1.2	395
Average	**2**	.....	**79.5**	**19.3**	*18.8*	**.6**	.....	**1.1**	**385**
As purchased—									
Minimum	2	55.8	34.8	8.3	*8.2*	.2	.....	.5	160
Maximum	2	55.9	35.3	8.7	*8.5*	.3	.....	.5	170
Average	**2**	**55.9**	**35.0**	**8.5**	*8.4*	**.2**	.....	**.5**	**165**
Red snapper, whole:									
Edible portion—									
Minimum	3	.....	77.4	19.3	*18.4*	.5	.....	1.3	380
Maximum	3	.....	79.8	20.2	*19.9*	1.9	.....	1.3	445
Average	**3**	.....	**78.5**	**19.7**	*19.2*	**1.0**	.....	**1.3**	**410**
As purchased—									
Minimum	2	39.6	36.8	9.4	*9.2*	.4	.....	.6	215
Maximum	2	52.5	47.2	12.2	*12.0*	.9	.....	.8	245
Average	**2**	**46.1**	**42.0**	**10.8**	*10.6*	**.6**	.....	**.7**	**225**
Red snapper, entrails and gills removed, as purchased	1	45.3	43.7	10.6	*10.0*	.3	.....	.7	210
Salmon, whole:									
Edible portion—									
Minimum	6	.....	61.0	19.4	*19.1*	10.2	.....	1.1	790
Maximum	6	.....	69.5	25.2	*24.5*	15.0	.....	1.6	1,035
Average	**6**	.....	**64.6**	**22.0**	*21.2*	**12.8**	.....	**1.4**	**950**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
FISH, FRESH—continued.									
Salmon, whole—Continued.									
As purchased—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	4	30.8	39.5	14.4	*13.3*	7.9	.....	0.9	510
Maximum	4	39.5	45.0	15.9	*15.6*	10.0	.....	1.0	690
Average	**4**	**34.9**	**40.9**	**15.3**	*14.4*	**8.9**	.....	**.9**	**660**
Salmon, entrails removed, as purchased:									
Minimum	2	23.8	45.0	12.6	*12.4*	6.6	.....	.8	510
Maximum	2	35.2	51.2	15.0	*14.6*	9.5	.....	.9	680
Average	**2**	**29.5**	**48.1**	**13.8**	*13.5*	**8.1**	.....	**.8**	**600**
Salmon, landlocked, whole, spent:									
Edible portion—									
Minimum	4	.....	75.3	16.6	*16.8*	2.0	.....	1.1	395
Maximum	4	.....	79.2	19.1	*19.2*	4.4	.....	1.2	500
Average	**4**	.....	**77.7**	**17.8**	*17.8*	**3.3**	.....	**1.2**	**470**
As purchased—									
Minimum	4	43.5	40.2	8.9	*8.7*	1.0	.....	.6	205
Maximum	4	48.4	44.2	10.7	*10.8*	2.5	.....	.7	305
Average	**4**	**45.5**	**42.3**	**9.7**	*9.8*	**1.8**	.....	**.6**	**255**
Salmon, California, anterior sections:									
Edible portion—									
Minimum	2	.....	62.7	17.0	*17.0*	16.5	.....	1.0	1,040
Maximum	2	.....	64.5	18.6	*18.0*	19.2	.....	1.1	1,125
Average	**2**	.....	**63.6**	**17.8**	*17.5*	**17.8**	.....	**1.1**	**1,080**
As purchased	1	10.3	57.9	16.7	*16.1*	14.8	.....	.9	935
Shad, whole:									
Edible portion—									
Minimum	7	.....	65.2	18.1	*17.7*	6.5	.....	.9	635
Maximum	7	.....	73.6	20.1	*20.0*	13.6	.....	1.5	945
Average	**7**	.....	**70.6**	**18.8**	*18.6*	**9.5**	.....	**1.3**	**750**
As purchased—									
Minimum	7	44.4	30.3	7.5	*7.4*	2.9	.....	.5	260
Maximum	7	58.8	39.5	10.7	*10.5*	7.3	.....	.8	505
Average	**7**	**50.1**	**35.2**	**9.4**	*9.2*	**4.8**	.....	**.7**	**380**
Shad, roe, as purchased	1	.....	71.2	20.9	.....	3.8	2.6	1.5	600
Sheepshead, whole:									
Edible portion—									
Minimum	2	.....	72.0	19.4	*18.9*	.7	.....	1.1	390
Maximum	2	.....	79.1	20.8	*20.2*	6.7	.....	1.3	670
Average	**2**	.....	**75.6**	**20.1**	*19.5*	**3.7**	.....	**1.2**	**530**
As purchased	1	66.0	26.9	6.6	*6.4*	.2	.....	.5	130
Sheepshead, entrails removed, as purchased	1	56.6	31.2	9.0	*8.8*	2.9	.....	.5	290
Skate, lobo of body:									
Edible portion	1	.....	82.2	18.2	*15.3*	1.4	.....	1.1	400
As purchased	1	51.0	40.2	8.9	*7.5*	.7	.....	.6	195
Smelt, whole:									
Edible portion—									
Minimum	2	.....	78.2	16.5	*15.9*	1.6	.....	1.4	385
Maximum	2	.....	80.2	18.7	*18.8*	1.9	.....	2.0	415
Average	**2**	.....	**79.2**	**17.6**	*17.3*	**1.8**	.....	**1.7**	**405**
As purchased—									
Minimum	2	34.8	39.9	9.5	*9.6*	.8	.....	.7	210
Maximum	2	49.0	52.3	10.8	*10.4*	1.2	.....	1.3	250
Average	**2**	**41.9**	**46.1**	**10.1**	*10.0*	**1.0**	.....	**1.0**	**230**
Spanish mackerel, whole:									
Edible portion	1	.....	68.1	21.5	*21.0*	9.4	.....	1.5	795
As purchased	1	34.6	44.5	14.1	*13.7*	6.2	.....	1.0	525
Sturgeon, anterior sections:									
Edible portion	1	.....	78.7	18.1	*18.0*	1.9	.....	1.4	415
As purchased	1	14.4	67.4	15.1	*15.4*	1.6	.....	1.2	350
Tomcod, whole:									
Edible portion	1	.....	81.5	17.2	*17.1*	.4	.....	1.0	335
As purchased	1	59.9	32.7	6.9	*6.8*	.2	.....	.4	135
Trout, brook, whole:									
Edible portion—									
Minimum	3	.....	75.8	18.6	*18.4*	.8	.....	1.0	385
Maximum	3	.....	79.8	20.3	*20.0*	2.9	.....	1.4	500
Average	**3**	.....	**77.8**	**19.2**	*18.9*	**2.1**	.....	**1.2**	**445**
As purchased—									
Minimum	3	45.2	38.6	9.3	*9.2*	.4	.....	.5	210
Maximum	3	50.1	43.8	10.1	*10.2*	1.5	.....	.7	255
Average	**3**	**48.1**	**40.4**	**9.9**	*9.8*	**1.1**	.....	**.6**	**230**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
FISH, FRESH—continued.									
Trout, salmon or lake:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	68.8	17.6	*17.3*	8.1	.....	1.0	675
Maximum	2	.....	72.9	17.9	*18.0*	12.6	.....	1.3	860
Average	**2**	.....	**70.8**	**17.8**	*17.7*	**10.3**	.....	**1.2**	**765**
As purchased—									
Minimum	2	40.7	30.0	7.7	*7.7*	4.8	.....	.6	370
Maximum	2	56.3	43.2	10.6	*10.7*	5.4	.....	.6	400
Average	**2**	**48.5**	**36.6**	**9.1**	*9.2*	**5.1**	.....	**.6**	**385**
Turbot:									
Edible portion	1	.....	71.4	14.8	*12.9*	14.4	.....	1.3	885
As purchased	1	47.7	37.3	7.7	*6.8*	7.5	.....	.7	460
Weakfish, whole:									
Edible portion	1	.....	79.0	17.8	*17.4*	2.4	.....	1.2	430
As purchased	1	51.9	38.0	8.6	*8.4*	1.1	.....	.6	205
Whitefish, whole:									
Edible portion	1	.....	69.8	22.9	*22.1*	6.5	.....	1.6	700
As purchased	1	53.5	32.5	10.6	*10.3*	3.0	.....	.7	325
FISH, COOKED.									
Bluefish, cooked, edible portion	1	.....	68.2	25.9	*26.1*	4.5	.....	1.2	670
Spanish mackerel, broiled:									
Edible portion	1	.....	68.9	23.7	*23.2*	6.5	.....	1.4	715
As purchased	1	7.9	63.5	21.8	*21.4*	5.9	.....	1.3	655
FISH, PRESERVED AND CANNED. *a*									
Cod, salt: *b*									
Edible portion—									
Minimum	2	.....	53.5	24.9	*21.2*	.2	.....	24.4	405
Maximum	2	.....	53.6	25.9	*21.7*	.4	.....	25.0	420
Average	**2**	.....	**53.5**	**25.4**	*21.5*	**.3**	.....	*c* **24.7**	**410**
As purchased—									
Minimum	2	24.3	40.0	18.5	*15.7*	.3	.....	18.4	300
Maximum	2	25.5	40.5	19.6	*16.4*	.4	.....	18.5	320
Average	**2**	**24.9**	**40.2**	**19.0**	*16.0*	**.4**	.....	**18.5**	**315**

a A considerable number of determinations of phosphorus, sulphur, and chlorin have been made in the flesh of preserved and canned fish. These are recorded in the following table in terms of phosphoric anhydrid (P_2O_5), sulphuric anhydrid (SO_3), and chlorin (Cl), and in percentages of the total weight of "edible portion" or flesh:

Phosphoric anhydrid, sulphuric anhydrid, and chlorin in samples of preserved and canned fish.

Kind of fish.	Phosphoric anhydrid.		Sulphuric anhydrid.		Chlorin.	
	Number of determinations.	Average.	Number of determinations.	Average.	Number of determinations.	Average.
		Per cent.		*Per cent.*		*Per cent.*
Cod, salt	2	0.25	2	0.74	2	11.92
Cod, salt, boneless	1	.36	1	.68	1	11.19
Halibut, smoked	1	.47	1	.44	1	8.66
Herring, smoked	1	.84	1	1.24	1	7.21
Mackerel, salt	1	.35	1	.61	.....	.....
Salmon, canned	1	.61	1	.44	.....	.....

b It is observable that in salt cod the proportion of protein by difference is much smaller than by factor. The former value is apparently more nearly correct, and has been used in estimating the fuel value per pound.

c Two samples averaged 23 per cent common salt.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
FISH, PRESERVED AND CANNED—continued.									
Cod, salt, "boneless":									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	54.4	26.3	*22.2*	0.3	.....	14.9	425
Maximum	2	.....	55.7	28.2	*29.1*	.3	.....	23.1	555
Average	**2**	.....	**55.0**	**27.3**	*25.7*	**.3**	.....	**a19.0**	**490**
As purchased	1	1.6	54.8	27.7	*28.6*	.3	.....	14.7	545
Haddock, smoked:									
Edible portion	1	.....	72.5	23.3	*23.7*	.2	.....	3.6	440
As purchased	1	32.2	49.2	15.8	*16.1*	.1	.....	2.4	305
Haddock, smoked, cooked, canned, as purchased	1	.....	68.7	22.3	*21.8*	2.3	.....	7.2	510
Halibut, smoked:									
Edible portion—									
Minimum	2	.....	47.7	18.5	*18.1*	14.4	.....	14.9	1,000
Maximum	2	.....	51.1	23.0	*23.0*	15.6	.....	15.2	1,035
Average	**2**	.....	**49.4**	**20.7**	*20.6*	**15.0**	.....	**b15.0**	**1,020**
As purchased—									
Minimum	2	5.9	44.9	17.0	*16.7*	13.6	.....	13.9	925
Maximum	2	8.0	47.0	21.6	*21.6*	14.4	.....	14.0	975
Average	**2**	**7.0**	**46.0**	**19.3**	*19.1*	**14.0**	.....	**13.9**	**950**
Herring, smoked:									
Edible portion	1	.....	34.6	36.9	*36.4*	15.8	.....	c13.2	1,355
As purchased	1	44.4	19.2	20.5	*20.2*	8.8	.....	7.4	750
Lamprey, canned:									
Edible portion	1	.....	63.3	16.9	.....	12.2	**3.6**	4.0	895
As purchased	1	d18.2	51.7	13.8	.....	10.0	**3.0**	3.3	735
Mackerel, salt, entrails removed:									
Edible portion	1	.....	42.2	21.1	*22.0*	22.6	.....	e13.2	1,345
As purchased	1	22.9	32.5	16.3	*17.0*	17.4	.....	10.2	1,035
Mackerel, salt, canned, as purchased	1	.....	68.2	19.6	*19.9*	8.7	.....	3.2	730
Mackerel, salt, canned in oil:									
Edible portion	1	.....	58.3	25.4	*23.5*	14.1	.....	4.1	1,065
As purchased	1	d31.5	39.9	17.4	*16.1*	9.7	.....	2.8	735
Mackerel, salt, dressed:									
Edible portion—									
Minimum	2	.....	43.2	16.6	*16.9*	24.9	.....	12.0	1,345
Maximum	2	.....	43.6	17.9	*17.7*	27.9	.....	13.8	1,485
Average	**2**	.....	**43.4**	**17.3**	*17.3*	**26.4**	.....	**f12.9**	**1,435**
As purchased—									
Minimum	2	17.0	33.8	13.8	*13.7*	19.3	.....	10.0	1,075
Maximum	2	22.4	35.8	13.9	*14.0*	23.2	.....	10.8	1,285
Average	**2**	**19.7**	**34.8**	**13.9**	*13.9*	**21.2**	.....	**10.4**	**1,155**
Minogy, pickled, canned:									
Edible portion	1	.....	56.5	22.0	*21.9*	18.6	.....	3.0	1,195
As purchased	1	g18.7	46.0	17.9	*17.8*	15.1	.....	2.4	970
Pilchard in tomatoes, canned, Russia, as purchased	1	.....	52.7	27.9	*27.5*	15.8	.....	4.0	1,185
Salmon, canned:									
Edible portion—									
Minimum	7	.....	57.5	19.5	*19.2*	5.3	.....	1.8	675
Maximum	7	.....	67.1	24.3	*24.3*	21.5	.....	3.5	1,270
Average	**7**	.....	**63.5**	**21.8**	*21.8*	**12.1**	.....	**2.6**	**915**
As purchased—									
Minimum	3	11.7	54.6	18.6	*18.8*	5.6	.....	1.5	615
Maximum	3	16.9	58.2	20.2	*20.3*	9.8	.....	2.4	760
Average	**3**	**14.2**	**56.8**	**19.5**	*19.5*	**7.5**	.....	**2.0**	**680**
Sardines, canned:									
Edible portion—									
Minimum	2	.....	48.2	21.2	*19.4*	12.7	.....	5.6	1,000
Maximum	2	.....	56.4	24.9	*25.3*	26.7	.....	5.7	1,520
Average	**2**	.....	**52.3**	**23.0**	*22.4*	**19.7**	.....	**5.6**	**1,260**
As purchased	1	d5.0	53.6	23.7	*24.0*	12.1	.....	5.3	950
Sturgeon, dried, Russia:									
Edible portion	1	.....	50.6	31.8	*32.2*	9.6	.....	7.6	995
As purchased	1	12.7	44.1	27.8	*28.1*	8.4	.....	6.7	870
Sturgeon, caviare, pressed, Russian, as purchased	1	.....	38.1	30.0	.....	19.7	7.6	4.6	1,530

a One sample contained 19.1 per cent common salt.
b One sample contained 12.1 per cent common salt.
c Contained 11.7 per cent common salt.
d Refuse, oil.
e Contained 9.2 per cent common salt.
f Contained 10.4 per cent common salt.
g Refuse, liquids.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
FISH, PRESERVED AND CANNED—continued.									
		P. ct.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Trout, brook:									
Edible portion	1	.....	68.4	22.3	*22.8*	6.1	.....	3.7	670
As purchased	1	3.5	66.1	21.5	*20.9*	5.9	.....	3.6	650
Tunney, as purchased	1	.....	72.7	21.7	*21.5*	4.1	.....	1.7	575
Tunney, canned in oil, Russia:									
Edible portion	1	.....	51.3	23.8	.....	20.0	0.6	4.3	1,300
As purchased	1	*a*16.7	42.7	20.3	.....	16.7	.....	3.6	1,085
AMPHIBIA.									
Frogs' legs:									
Edible portion—									
Minimum	2	.....	81.2	13.2	*12.8*	.2	.....	.8	255
Maximum	2	.....	86.2	17.7	*17.4*	.2	.....	1.2	335
Average	**2**	.....	**83.7**	**15.5**	*15.1*	**.2**	.....	**1.0**	**295**
As purchased—									
Minimum	2	31.3	54.8	9.1	*8.8*	.1	.....	.6	175
Maximum	2	32.6	59.1	12.0	*11.7*	.2	.....	.8	225
Average	**2**	**32.0**	**56.9**	**10.5**	*10.3*	**.1**	.....	**.7**	**200**
SHELLFISH, ETC., FRESH. *b*									
Clams, long, in shell:									
Edible portion—									
Minimum	4	.....	85.0	8.1	.....	1.0	1.6	2.0	225
Maximum	4	.....	86.1	9.0	.....	1.2	2.5	3.0	255
Average	**4**	.....	**85.8**	**8.6**	.....	**1.0**	**2.0**	**2.6**	**240**
As purchased—									
Minimum	4	39.9	47.2	4.4	.....	.5	.9	1.2	120
Maximum	4	45.2	51.7	5.2	.....	.7	1.5	1.7	150
Average	**4**	**41.9**	**49.9**	**5.0**	.....	**.6**	**1.1**	**1.5**	**140**
Clams, round, in shell:									
Edible portion	1	.....	86.2	6.5	.....	.4	4.2	2.7	215
As purchased	1	67.5	28.0	2.1	.....	.1	1.4	.9	70
Clams, round, removed from shell, as purchased	1	.....	80.8	10.6	.....	1.1	5.2	2.3	340
Crabs, hardshell, whole:									
Edible portion	1	.....	77.1	16.6	.....	2.0	1.2	3.1	415
As purchased	1	52.4	36.7	7.9	.....	.9	.6	1.5	195
Crayfish, abdomen, whole:									
Edible portion	1	.....	81.2	16.0	.....	.5	1.0	1.3	340
As purchased	1	*c*86.6	10.9	2.1	.....	.1	.1	.2	45

a Refuse, oil.

b A considerable number of determinations of phosphorous and sulphur have been made in the flesh of shellfish. These are recorded in the following table in terms of phosphoric anhydrid (P_2O_5) and sulphuric anhydrid (SO_3) and in percentages of the total weight of "edible portion" or flesh:

Phosphoric anhydrid and sulphuric anhydrid in samples of shellfish.

Kind of fish.	Phosphoric anhydrid.		Sulphuric anhydrid.	
	Number of determinations.	Average.	Number of determinations.	Average.
		Per cent.		*Per cent.*
Clams, long	2	0.48	2	0.56
Clams, round	1	.40	1	.89
Crayfish	1	.53	1	.26
Lobster	3	.38	3	.42
Oysters	14	.30	14	.68
Scallops	2	.48	2	.49
Lobster, canned	1	.23	1	.48
Oysters, canned	1	.35	1	.20

c Refuse of whole.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
SHELLFISH, ETC., FRESH—continued.									
Lobster, whole:									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	5	.....	68.6	11.6	.....	1.5	.....	1.6	345
Maximum	5	.....	84.3	25.4	.....	2.5	0.9	4.0	555
Average	**5**	.....	**79.2**	**16.4**	.....	**1.8**	**.4**	**2.2**	**390**
As purchased—									
Minimum	5	44.0	18.0	4.4	.....	.5	.....	.6	115
Maximum	5	73.7	47.2	6.7	.....	.9	.4	1.0	165
Average	**5**	**61.7**	**30.7**	**5.9**	.....	**.7**	**.2**	**.8**	**140**
Mussels, in shell:									
Edible portion	1	.....	84.2	8.7	.....	1.1	4.1	1.9	285
As purchased	1	46.7	44.9	4.6	.....	.6	2.2	1.0	150
Oysters in shell:									
Edible portion—									
Minimum	34	.....	81.7	4.2	.....	.6	1.8	1.2	135
Maximum	34	.....	91.4	10.0	.....	1.9	6.7	2.8	370
Average	**34**	.....	**86.9**	**6.2**	.....	**1.2**	**3.7**	**2.0**	**235**
As purchased—									
Minimum	34	74.0	10.7	.7	.....	.1	.2	.2	15
Maximum	34	88.3	23.1	1.8	.....	.4	1.3	.6	65
Average	**34**	**81.4**	**16.1**	**1.2**	.....	**.2**	**.7**	**.4**	**45**
Oysters, solids, as purchased:									
Minimum	9	.....	82.2	4.5	.....	.5	1.5	.7	135
Maximum	9	.....	92.4	7.3	.....	1.8	6.2	2.5	325
Average	**9**	.....	**88.3**	**6.0**	.....	**1.3**	**3.3**	**1.1**	**230**
Scallops, as purchased:									
Minimum	2	.....	77.8	14.5	.....	.....	1.1	1.3	305
Maximum	2	.....	82.8	15.1	.....	.3	5.6	1.5	385
Average	**2**	.....	**80.3**	**14.8**	.....	**.1**	**3.4**	**1.4**	**345**
Terrapin:									
Edible portion	1	.....	74.5	21.2	*21.0*	3.5	.....	1.0	545
As purchased	1	75.4	18.3	5.2	*5.2*	.9	.....	.2	135
Turtle, green, whole:									
Edible portion	1	.....	79.8	19.8	*18.5*	.5	.....	1.2	390
As purchased	1	76.0	19.2	4.7	*4.4*	.1	.....	.3	90
SHELLFISH, ETC., CANNED.									
Clams, long, as purchased	1	.....	84.5	9.0	.....	1.3	2.9	2.3	275
Clams, round, as purchased	1	.....	82.9	10.5	.....	.8	3.0	2.8	285
Crabs, as purchased:									
Minimum	2	.....	78.9	15.6	.....	.8	.7	1.8	340
Maximum	2	.....	81.0	16.0	.....	2.3	.8	2.1	410
Average	**2**	.....	**80.0**	**15.8**	.....	**1.5**	**.7**	**2.0**	**370**
Lobster, as purchased:									
Minimum	2	.....	76.2	16.7	.....	.5	.5	2.1	345
Maximum	2	.....	79.4	19.5	.....	1.7	.6	2.8	445
Average	**2**	.....	**77.8**	**18.1**	.....	**1.1**	**.5**	**2.5**	**390**
Oysters, as purchased:									
Minimum	4	.....	78.1	7.0	.....	2.0	2.6	1.2	280
Maximum	4	.....	86.0	13.0	.....	3.4	5.2	1.9	310
Average	**4**	.....	**83.4**	**8.8**	.....	**2.4**	**3.9**	**1.5**	**335**
Shrimp, as purchased	1	.....	70.8	25.4	.....	1.0	.2	2.6	520
EGGS.									
Hens', uncooked: *a*									
Edible portion—									
Minimum	60	.....	67.2	11.6	*11.4*	8.6	.....	.6	660
Maximum	60	.....	75.8	16.0	*17.4*	15.1	.....	1.6	910
Average	**60**	.....	**73.7**	**13.4**	*14.8*	**10.5**	.....	**1.0**	**720**
As purchased	....	*b*11.2	65.5	11.9	*13.1*	9.3	.....	.9	635
Hens', boiled:									
Edible portion—									
Minimum	19	.....	68.6	10.0	*10.3*	9.1	.....	.6	575
Maximum	19	.....	79.9	15.6	*16.8*	14.7	.....	1.1	880
Average	**19**	.....	**73.2**	**13.2**	*14.0*	**12.0**	.....	**.8**	**765**
As purchased	....	*b*11.2	65.0	11.7	*12.4*	10.7	.....	.7	680

a Eggs are difficult of analysis and the discrepancy between the protein by factor and by difference may be due in part to incomplete determination of nitrogen and fat. It is also probable that the factor 6.25 is not correct for eggs. The value of protein by difference is perhaps the more nearly correct and has been used in the computation of the fuel value per pound.

b Average percentage refuse (shell) in 34 samples.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
EGGS—continued.									
Hens', boiled whites:									
Edible portion—*a*		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	11	.....	83.1	11.6	*12.3*	.....	.....	0.4	235
Maximum	11	.....	87.1	14.8	*15.4*	0.3	.....	1.0	295
Average	**11**	.....	**86.2**	**12.3**	*13.0*	**.2**	.....	**.6**	**250**
Hens', boiled yolks:									
Edible portion—*b*									
Minimum	11	.....	48.4	15.3	*15.5*	32.2	.....	1.0	1,685
Maximum	11	.....	50.2	16.8	*18.0*	34.4	.....	1.4	1,745
Average	**11**	.....	**49.5**	**15.7**	*16.1*	**33.3**	.....	**1.1**	**1,705**
DAIRY PRODUCTS, ETC.									
Butter, as purchased *c*	....	.....	11.0	1.0	.....	85.0	.....	3.0	3,605
Buttermilk, as purchased	....	.....	91.0	3.0	.....	.5	4.8	.7	165
Cheese, American, pale, as purchased *d*	1	.....	31.6	28.8	.....	35.9	*e* .3	3.4	2,055
Cheese, American, red, as purchased *f*	1	.....	28.6	.....	*29.6*	38.3	.....	3.5	2,165
Cheese, Boudon, as purchased *g*	1	.....	55.2	15.4	.....	20.8	*h* 1.6	7.0	1,195
Cheese, California flat, as purchased	4	.....	34.0	24.3	.....	33.4	4.5	3.8	1,945
Cheese, Cheddar, as purchased *i*	6	.....	27.4	27.7	.....	36.8	4.1	4.0	2,145
Cheese, Cheshire, as purchased *j*	1	.....	37.1	26.9	.....	30.7	*e* .9	4.4	1,810
Cheese, cottage, as purchased:									
Minimum	2	.....	67.0	16.1	.....	.4	3.7	1.6	435
Maximum	2	.....	77.0	25.7	.....	1.6	4.9	2.0	585
Average	**2**	.....	**72.0**	**20.9**	.....	**1.0**	**4.3**	**1.8**	**510**
Cheese, Crown brand cream, as purchased *k*	1	.....	31.4	5.2	.....	58.0	2.2	3.2	2,585
Cheese, Dutch, as purchased:									
Minimum	2	.....	27.6	.....	*29.6*	16.3	.....	8.7	1,240
Maximum	2	.....	42.7	.....	*44.7*	19.0	.....	11.4	1,630
Average	**2**	.....	**35.2**	.....	*37.1*	**17.7**	.....	**10.0**	**1,435**
Cheese, Fromage de Bric, as purchased *l*	1	.....	60.2	15.9	.....	21.0	1.4	1.5	1,210
Cheese, full cream, as purchased: *m*									
Minimum	25	.....	27.0	17.9	.....	24.5	1.2	2.5	1,790
Maximum	25	.....	44.1	37.0	.....	44.6	4.0	4.9	2,430
Average	**25**	.....	**34.2**	**25.9**	.....	**33.7**	**2.4**	**3.8**	**1,950**
Cheese, imitation full cream, Ohio, as purchased	1	.....	37.9	.....	*25.9*	31.7	.....	4.5	1,820
Cheese, imitation old English, as purchased *n*	1	.....	20.7	30.1	.....	42.7	1.3	5.2	2,385
Cheese, Limburger, as purchased *o*	1	.....	42.1	23.0	.....	29.4	.4	5.1	1,675
Cheese, Neuchatel, as purchased: *p*									
Minimum	2	.....	42.7	15.1	.....	22.3	.2	2.3	1,275
Maximum	2	.....	57.2	22.3	.....	32.5	2.9	2.5	1,790
Average	**2**	.....	**50.0**	**18.7**	.....	**27.4**	**1.5**	**2.4**	**1,530**

a The ash of the whites of 73 eggs contained 3.3 per cent phosphoric anhydrid.

b The ash of the yolks of 73 eggs contained 57.2 per cent phosphoric anhydrid.

c The averages given for butter, buttermilk, cream, skimmed milk, and whole milk are assumed from the most reliable data available, but are not averages of all analyses.

d Contained 0.82 per cent common salt.

e Lactic acid.

f Contained 0.72 per cent common salt.

g Contained 3.16 per cent common salt.

h Milk sugar 0.7 per cent; lactic acid 0.9 per cent.

i One sample contained 0.45 per cent lactic acid and 1.43 per cent common salt.

j Contained 1.69 per cent common salt.

k Contained 2.72 per cent common salt.

l Contained 0.40 per cent common salt.

m Four cheeses were analyzed when 1, 3, and 5 weeks old. The average composition is as follows: When 7 days old, water 35.4, protein 21.6, fat 35.8, carbohydrates 3.9, and ash 3.3 per cent; when 21 days old, water 34.7, protein 22.7, fat 36.6, carbohydrates 2.1, and ash 3.9 per cent; when 35 days old, water 34.9, protein 23.3, fat 36.7, carbohydrates 0.7, and ash 4.4 per cent. The average of 20 analyses in which protein and carbohydrates were determined by difference gives: Water 28.3. protein and carbohydrates 38, fat 32.7, and ash 4 per cent. The average of 78 analyses in which the carbohydrates and ash were determined by difference gives: Water 24.9, protein 38, fat 32.7, carbohydrates and ash 4.4 per cent. The average of 148 analyses of green cheese in which the carbohydrates and ash were determined by difference gives: Water 33, protein 28.6, fat 33.7, carbohydrates and ash 4.7 per cent.

n Contained 1.47 per cent common salt.

o Contained 3.51 per cent common salt.

p The average of 10 analyses in which protein and sugar were not determined gives: Water 53.6, protein and sugar (by difference) 18.9, fat 27.7, lactic acid 1.2, and ash 2.6 per cent (including 1.4 per cent common salt).

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
ANIMAL FOOD—Continued.									
DAIRY PRODUCTS, ETC.—continued.									
Cheese, partly skimmed milk, as purchased: *a*		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	3	.....	34.8	23.5	.....	23.7	2.3	3.2	1,580
Maximum	3	.....	42.0	27.6	.....	34.5	4.9	3.4	1,970
Average	**3**	.....	**38.2**	**25.4**	.....	**29.5**	**3.6**	**3.3**	**1,785**
Cheese, pineapple, as purchased: *b*									
Minimum	5	.....	11.6	27.0	.....	33.3	2.2	5.1	1,965
Maximum	5	.....	31.0	34.5	.....	45.2	3.1	6.2	2,600
Average	**5**	.....	**23.0**	**29.9**	.....	**38.9**	**2.6**	**5.6**	**2,245**
Cheese, Roquefort, as purchased *c*	1	.....	39.3	22.6	.....	29.5	1.8	6.8	1,700
Cheese, skimmed milk, as purchased: *d*									
Minimum	9	.....	37.3	26.3	.....	6.8	.....	2.4	1,090
Maximum	9	.....	53.1	38.4	.....	27.8	9.0	5.1	1,740
Average	**9**	.....	**45.7**	**31.5**	.....	**16.4**	**2.2**	**4.2**	**1,320**
Cheese, Swiss, as purchased: *e*									
Minimum	2	.....	28.9	26.1	.....	33.2	.9	4.4	1,920
Maximum	2	.....	33.8	29.1	.....	36.7	1.7	5.2	2,105
Average	**2**	.....	**31.4**	**27.6**	.....	**34.9**	**1.3**	**4.8**	**2,010**
Cheese, whole milk. (*See* Full cream cheese.)									
Cream, as purchased *f*	....	.....	74.0	2.5	.....	18.5	4.5	.5	910
Koumiss, as purchased: *g*									
Minimum	8	.....	88.8	2.6	.....	1.7	5.1	.4	215
Maximum	8	.....	90.0	3.0	.....	2.4	5.9	.4	265
Average	**8**	.....	**89.3**	**2.8**	.....	**2.1**	**5.4**	**.4**	**240**
Milk, condensed, sweetened, as purchased: *h*									
Minimum	24	.....	21.6	6.0	.....	.4	44.4	1.5	1,270
Maximum	24	.....	37.3	10.5	.....	10.6	56.9	2.1	1,650
Average	**24**	.....	**26.9**	**8.8**	.....	**8.3**	**54.1**	**1.9**	**1,520**
Milk, condensed, unsweetened, "evaporated cream," as purchased:									
Minimum	6	.....	66.3	8.6	.....	7.8	10.4	1.5	740
Maximum	6	.....	69.6	10.5	.....	10.4	12.2	2.1	835
Average	**6**	.....	**68.2**	**9.6**	.....	**9.3**	**11.2**	**1.7**	**780**
Milk, skimmed, as purchased *f*	....	.....	90.5	3.4	.....	.3	5.1	.7	170
Milk, whole, as purchased *f*	....	.....	87.0	3.3	.....	4.0	5.0	*i* .7	325
Whey, as purchased	....	.....	93.0	1.0	.....	.3	5.0	.7	125
MISCELLANEOUS.									
Gelatin, as purchased:									
Minimum	6	.....	9.6	89.3	*82.2*	.....	.....	1.4	1,660
Maximum	6	.....	15.4	97.5	*88.3*	.4	.....	4.4	1,830
Average	**6**	.....	**13.6**	**91.4**	*84.2*	**.1**	.....	**2.1**	**1,705**
Calf's-foot jelly, as purchased	1	.....	77.6	4.3	.....	.....	17.4	.7	405
Isinglass, sturgeon, as purchased	1	.....	19.0	89.3	*77.4*	1.6	.....	2.0	1,730
Spinal column, sturgeon, as purchased	1	.....	17.7	59.8	.....	17.1	.8	4.6	1,850
Lard, refined, as purchased	1	.....	.....	.....	.....	100.0	.....	.....	4,220
Lard, unrefined, as purchased:									
Minimum	3	.....	3.1	1.7	*.9*	92.0	.....	.1	3,895
Maximum	3	.....	6.6	2.9	*1.3*	95.9	.....	.1	4,065
Average	**3**	.....	**4.8**	**2.2**	*1.1*	**94.0**	.....	**.1**	**4,010**
Tallow, refined, as purchased	1	.....	.....	.....	.....	100.0	.....	.....	4,220
Cottolene, as purchased	1	.....	.....	.....	.....	100.0	.....	.....	4,220
Oleomargarine, as purchased	41	.....	9.5	1.2	.....	83.0	.....	6.3	3,525
Beef juice, as purchased	1	.....	93.0	4.9	.....	.6	.....	1.5	115

a Three cheeses were analyzed when 1, 3, and 5 weeks old. The average composition is as follows: When 1 week old, water 38.4, protein 25, fat 30, carbohydrates 3.3, and ash 3.3 per cent; when 3 weeks old, water 38.4, protein 25.3, fat 29, carbohydrates 4, and ash 3.3 per cent; when 5 weeks old, water 37.7, protein 26, fat 29.7, carbohydrates 3.2, and ash 3.4 per cent.

b Four samples contained an average of 2.13 per cent common salt.

c Contained 5.3 per cent common salt.

d Two samples contained an average of 1.5 per cent common salt.

e Contained 1.9 per cent common salt.

f The averages given for butter, buttermilk, cream, skim milk, and whole milk are assumed from the most reliable data available, but are not averages of all analyses.

g Contained, on the average, 4.4 per cent cane sugar and 0.76 per cent alcohol. Ash not reported, but assumed from European analyses

h Sixteen samples contained, on the average, 43.6 per cent cane sugar.

i According to Farrington and Woll the ash of cows' milk contains, on the average, K_2O 25.6, Na_2O 12.5, CaO 24.6, P_2O_5 21.2, and Cl 16.3 per cent.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD.									
FLOURS, MEALS, ETC.									
		P. ct.	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Barley, granulated	1	.....	10.9	7.5	0.9	79.8	*0.7*	0.9	1,660
Barley meal and flour:									
Minimum	3	.....	9.9	9.0	1.5	70.4	*5.9*	1.6	1,535
Maximum	3	.....	13.6	12.7	3.2	74.5	*7.0*	3.8	1,680
Average	**3**	.....	**11.9**	**10.5**	**2.2**	**72.8**	(3)*6.5*	**2.6**	**1,640**
Barley, pearled:									
Minimum	3	.....	9.8	7.0	.7	77.3	.....	.6	1,635
Maximum	3	.....	12.9	10.1	1.5	78.1	.....	1.6	1,675
Average	**3**	.....	**11.5**	**8.5**	**1.1**	**77.8**	(1)*.3*	**1.1**	**1,650**
Buckwheat flour:									
Minimum	17	.....	11.2	**3.9**	**.5**	71.6	*.2*	.5	1,560
Maximum	17	.....	17.6	10.4	2.3	81.5	*.7*	1.8	1,650
Average	**17**	.....	**13.6**	**6.4**	**1.2**	**77.9**	(8)*.4*	**.9**	**1,620**
Buckwheat preparations:									
Farina and groats—									
Minimum	2	.....	10.6	3.3	.3	83.4	*.1*	.4	1,650
Maximum	2	.....	11.2	4.8	.6	84.8	*.3*	.6	1,665
Average	**2**	.....	**10.9**	**4.1**	**.4**	**84.1**	*.2*	**.5**	**1,660**
Self-raising—									
Minimum	14	.....	9.8	5.5	.3	70.1	.....	4.4	1,515
Maximum	14	.....	13.6	11.1	1.4	77.3	.....	7.0	1,600
Average	**14**	.....	**11.6**	**8.2**	**1.2**	**73.4**	(1)*.4*	**5.6**	**1,570**
Corn flour: *a*									
Minimum	3	.....	12.0	5.9	1.0	76.9	*.6*	.5	1,630
Maximum	3	.....	13.0	8.5	1.8	79.6	*1.2*	.8	1,665
Average	**3**	.....	**12.6**	**7.1**	**1.3**	**78.4**	*.9*	**.6**	**1,645**
Corn meal, granular: *b*									
Minimum	19	.....	8.8	6.7	1.0	68.4	.....	.5	1,550
Maximum	19	.....	17.9	11.6	5.3	80.6	.....	1.9	1,720
Average	**19**	.....	**12.5**	**9.2**	**1.9**	**75.4**	(1)*1.0*	**1.0**	**1,655**
Corn meal, unbolted:									
Edible portion—									
Minimum	7	.....	10.9	7.8	4.5	71.9	.....	1.2	1,720
Maximum	7	.....	12.4	9.3	5.2	75.4	.....	1.4	1,740
Average	**7**	.....	**11.6**	**8.4**	**4.7**	**74.0**	.....	**1.3**	**1,730**
As purchased—									
Minimum	7	*c* 4.2	9.2	6.5	3.5	55.7	.....	1.0	1,305
Maximum	7	24.1	10.8	8.0	4.5	72.2	.....	1.3	1,670
Average	**7**	**10.9**	**10.3**	**7.5**	**4.2**	**65.9**	.....	**1.2**	**1,545**
Pop corn:									
Minimum	2	.....	4.1	10.3	4.7	78.6	*1.3*	1.3	1,870
Maximum	2	.....	4.4	11.1	5.4	78.7	*1.4*	1.4	1,880
Average	**2**	.....	**4.3**	**10.7**	**5.0**	**78.7**	*1.4*	**1.3**	**1,875**
Corn preparations.									
Cerealine *d*—									
Minimum	5	.....	9.5	9.1	.9	76.6	*.2*	.2	1,635
Maximum	5	.....	11.0	9.9	1.3	79.2	*.7*	2.3	1,710
Average	**5**	.....	**10.3**	**9.6**	**1.1**	**78.3**	(1)*.4*	**.7**	**1,680**
Hominy—									
Minimum	17	.....	9.2	6.3	.2	77.3	*.2*	.1	1,610
Maximum	17	.....	13.4	9.5	1.0	81.4	*1.0*	.7	1,700
Average	**17**	.....	**11.8**	**8.3**	**.6**	**79.0**	(12)*.9*	**.3**	**1,650**
Hominy, cooked	1	.....	79.3	2.2	.2	17.8	.....	.5	380
Parched—									
Minimum	2	.....	4.9	11.1	8.2	71.1	.....	1.7	1,895
Maximum	2	.....	5.6	11.8	8.7	73.4	.....	3.5	1,930
Average	**2**	.....	**5.2**	**11.5**	**8.4**	**72.3**	.....	**2.6**	**1,915**
Kafir corn	1	.....	16.8	6.6	3.8	70.6	*1.1*	2.2	1,595
Oatmeal: *e*									
Minimum	16	.....	2.0	12.9	6.0	63.8	*.6*	1.5	1,810
Maximum	16	.....	8.8	20.8	8.8	70.2	*1.2*	2.2	1,875
Average	**16**	.....	**7.3**	**16.1**	**7.2**	**67.5**	(9)*.9*	**1.9**	**1,860**
Oatmeal, boiled	1	.....	84.5	2.8	.5	11.5	.....	.7	285

a Average of 77 analyses of corn meal used for fodder gives water 15, protein 8.2, fat 3.8, carbohydrates 68.7, fiber 1.9, and ash 1.4 per cent, and fuel value 1,610 calories.

b The ash of 1 sample contained 0.185 per cent phosphorus.

c Refuse, bran removed by sifting.

d The ash of 1 sample contained 0.192 per cent phosphorus.

e The ash of 1 sample contained 0.414 per cent phosphorus.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
FLOURS, MEALS, ETC.—continued.									
Oatmeal gruel:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	87.5	0.9	0.2	2.9	.....	0.3	80
Maximum	2	.....	95.7	1.6	.5	9.6	.....	.8	230
Average	**2**	.....	**91.6**	**1.2**	**.4**	**6.3**	.....	**.5**	**155**
Oatmeal water:									
Minimum	2	.....	94.0	.4	.1	1.3	.....	.1	35
Maximum	2	.....	98.1	.9	.1	4.5	.....	.5	105
Average	**2**	.....	**96.0**	**.7**	**.1**	**2.9**	.....	**.3**	**70**
Oats, other preparations: *a*									
Rolled oats—									
Minimum	20	.....	5.5	13.6	5.6	62.8	*1.2*	1.6	1,755
Maximum	20	.....	11.2	19.1	8.8	70.8	*1.4*	4.7	1,885
Average	**20**	.....	**7.7**	**16.7**	**7.3**	**66.2**	(2)*1.3*	**2.1**	**1,850**
Miscellaneous—									
Minimum	26	.....	6.4	13.7	6.1	63.9	*.6*	1.3	1,830
Maximum	26	.....	9.2	18.4	8.2	70.5	*1.7*	1.9	1,890
Average	**26**	.....	**7.9**	**16.3**	**7.3**	**66.8**	(20)*.9*	**1.7**	**1,855**
All analyses, average *b*	**46**	.....	**7.8**	**16.5**	**7.3**	**66.5**	(22)*1.0*	**1.9**	**1,850**
Rice:									
Minimum	21	.....	9.1	5.9	.1	75.4	*.1*	.2	1,600
Maximum	21	.....	14.0	11.3	.7	81.9	*.4*	.5	1,690
Average	**21**	.....	**12.3**	**8.0**	**.3**	**79.0**	(13)*.2*	**.4**	**1,630**
Rice, boiled:									
Minimum	3	.....	52.7	1.6	.....	15.5	.....	.1	330
Maximum	3	.....	82.7	5.0	.1	41.9	.....	.3	875
Average	**3**	.....	**72.5**	**2.8**	**.1**	**24.4**	.....	**.3**	**525**
Rice, flaked:									
Minimum	2	.....	9.4	7.5	.3	81.4	*.1*	.3	1,680
Maximum	2	.....	9.7	8.3	.5	82.2	*.2*	.4	1,690
Average	**2**	.....	**9.5**	**7.9**	**.4**	**81.9**	*.2*	**.3**	**1,685**
Rice flour: *c*									
Minimum	4	.....	3.7	4.7	1.7	58.3	*9.1*	6.6	1,635
Maximum	4	.....	10.9	12.0	10.4	79.2	*28.3*	10.7	1,765
Average	**4**	.....	**8.5**	**8.6**	**6.1**	**68.0**	*16.1*	**8.8**	**1,680**
Rye flour:									
Minimum	8	.....	11.9	4.9	.2	77.6	*.4*	.6	1,615
Maximum	8	.....	13.6	8.8	1.3	80.2	*.5*	.9	1,650
Average	**8**	.....	**12.9**	**6.8**	**.9**	**78.7**	(4)*.4*	**.7**	**1,630**
Rye meal	1	.....	11.4	13.6	2.0	71.5	*1.8*	1.5	1,665
Wheat flour, California fine: *d*									
Minimum	3	.....	12.4	7.2	1.2	73.9	.....	.4	1,590
Maximum	3	.....	15.6	8.8	1.6	77.8	.....	.5	1,660
Average	**3**	.....	**13.8**	**7.9**	**1.4**	**76.4**	.....	**.5**	**1,625**
Wheat flour, entire wheat:									
Minimum	9	.....	6.4	12.2	1.5	69.5	*.5*	.6	1,635
Maximum	9	.....	13.1	14.6	2.1	77.0	*1.2*	1.5	1,760
Average	**9**	.....	**11.4**	**13.8**	**1.9**	**71.9**	(3)*.9*	**1.0**	**1,675**
Wheat flour, gluten:									
Minimum	5	.....	10.5	12.8	1.1	69.6	.....	.5	1,635
Maximum	5	.....	13.0	15.0	2.4	72.8	*.6*	1.3	1,690
Average	**5**	.....	**12.0**	**14.2**	**1.8**	**71.1**	(1)*.6*	**.9**	**1,665**
Wheat flour, Graham:									
Minimum	13	.....	9.9	8.5	1.5	66.0	*1.8*	1.0	1,615
Maximum	13	.....	13.7	17.7	3.6	75.8	*2.0*	2.7	1,710
Average	**13**	.....	**11.3**	**13.3**	**2.2**	**71.4**	(3)*1.9*	**1.8**	**1,670**
Wheat flour, prepared (self-raising): *e*									
Minimum	29	.....	8.0	8.0	.6	67.4	*.4*	1.5	1,550
Maximum	29	.....	13.0	13.3	2.2	78.6	*.5*	7.1	1,730
Average	**29**	.....	**10.8**	**10.2**	**1.2**	**73.0**	(3) *.4*	**4.8**	**1,600**

a The preparations analyzed include a considerable number of brands, each of which varies in composition only slightly from the average.

b The ash of 5 samples contained an average of 0.418 per cent phosphorus.

c Rice flour is used mainly as a fodder, and varies considerably in composition. The ash of 2 samples contained an average of P_2O_5 29.1, K_2O 12.6, CaO 1, MgO 7.6, and SO_3 0.3 per cent. Two samples contained an average of protein (N×6.25) 11.8, and proteids 11.6 per cent.

d The ash of 3 complete samples contained an average of 49.3 per cent P_2O_5.

e The flours analyzed included 18 varieties or brands. The variation between different samples of the same brand is as wide as that between the averages of the different brands. The widest variation is in the ash, which of course depends upon the mineral matters added for raising.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
FLOURS, MEALS, ETC.—continued.									
Wheat flour, patent roller process, bakers' grade:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	14	.....	10.1	10.3	0.9	70.3	*0.3*	0.5	1,640
Maximum	14	.....	13.3	14.9	2.0	75.5	*1.5*	.9	1,705
Average	**14**	.....	**11.9**	**13.3**	**1.5**	**72.7**	(6) *.7*	**.6**	**1,665**
Wheat flour, patent roller process, family and straight grade:									
Spring wheat—									
Minimum	3	.....	10.3	9.6	1.0	72.7	.....	.4	1,635
Maximum	3	.....	13.1	13.3	1.2	78.5	.....	.6	1,680
Average	**3**	.....	**11.9**	**10.9**	**1.1**	**75.6**	(1) *.1*	**.5**	**1,655**
Winter wheat—*a*									
Minimum	6	.....	11.7	10.8	1.0	72.1	*.2*	.3	1,615
Maximum	6	.....	14.0	13.7	1.3	73.7	*.4*	.6	1,655
Average	**6**	.....	**13.1**	**12.3**	**1.1**	**73.0**	(4) *.3*	**.5**	**1,635**
Undesignated—									
Minimum	19	.....	9.4	9.3	.8	72.8	.....	.3	1,610
Maximum	19	.....	14.1	12.6	1.6	77.9	.....	.6	1,705
Average	**19**	.....	**12.9**	**10.4**	**1.0**	**75.2**	(1) *.1*	**.5**	**1,635**
All analyses, average	**28**	.....	**12.8**	**10.8**	**1.1**	**74.8**	(6) *.2*	**.5**	**1,640**
Wheat flour, patent roller process, grade not indicated:									
Minimum	111	.....	8.2	8.4	.3	70.3	*.1*	.3	1,640
Maximum	111	.....	13.9	14.7	1.6	80.0	*.3*	.8	1,730
Average	**111**	.....	**11.5**	**11.4**	**1.0**	**75.6**	(15) *.2*	**.5**	**1,660**
Wheat flour, patent roller process, high grade:									
Spring wheat—									
Minimum	23	.....	8.8	8.7	.7	71.7	*.1*	.3	1,615
Maximum	23	.....	14.3	13.8	1.9	78.1	*.2*	.5	1,715
Average	**23**	.....	**12.3**	**11.7**	**1.1**	**74.5**	(7) *.1*	**.4**	**1,650**
Winter wheat—*b*									
Minimum	6	.....	12.1	9.3	.8	71.6	*.2*	.3	1,615
Maximum	6	.....	14.0	14.9	1.0	75.5	*.4*	.6	1,645
Average	**6**	.....	**13.3**	**11.0**	**.9**	**74.4**	*.3*	**.4**	**1,625**
Undesignated—									
Minimum	28	.....	9.6	8.2	.7	72.4	.....	.3	1,615
Maximum	28	.....	13.8	14.5	1.9	77.5	.....	.6	1,700
Average	**28**	.....	**12.5**	**10.8**	**1.0**	**75.2**	(1) *.1*	**.5**	**1,640**
All analyses, average	**57**	.....	**12.4**	**11.2**	**1.0**	**74.9**	(14) *.2*	**.5**	**1,645**
Average of all analyses of high and medium grades and grade not indicated	**210**	.....	**12.0**	**11.4**	**1.0**	**75.1**	(41) *.3*	**.5**	**1,650**
Wheat flour, patent roller process, low grade: *c*									
Minimum	13	.....	9.3	10.0	.8	64.2	*.5*	.5	1,645
Maximum	13	.....	13.9	17.9	3.9	75.9	*.9*	2.0	1,735
Average	**13**	.....	**12.0**	**14.0**	**1.9**	**71.2**	(7) *.8*	**.9**	**1,665**
Wheat flour, unclassified process, grade not indicated:									
Spring wheat—*d*									
Minimum	4	.....	11.4	9.6	.6	73.5	*.4*	.5	1,610
Maximum	4	.....	13.5	12.1	1.3	77.4	*.8*	.9	1,650
Average	**4**	.....	**12.4**	**10.5**	**1.0**	**75.4**	(3) *.5*	**.7**	**1,640**
Winter wheat—*e*									
Minimum	21	.....	9.9	8.5	.4	73.2	*.2*	.3	1,605
Maximum	21	.....	14.4	12.5	1.5	78.2	*.5*	1.8	1,680
Average	**21**	.....	**11.9**	**10.7**	**1.0**	**75.8**	(5) *.4*	**.6**	**1,650**
Undesignated—*f*									
Minimum	8	.....	6.7	8.7	.6	75.3	*.3*	.4	1,645
Maximum	8	.....	11.7	11.4	1.6	82.1	*1.8*	.9	1,760
Average	**8**	.....	**9.4**	**10.4**	**1.2**	**78.4**	(3) *.9*	**.6**	**1,700**
All analyses, average	**33**	.....	**11.4**	**10.6**	**1.1**	**76.3**	(10) *.2*	**.6**	**1,665**

a The ash of 1 sample contained K_2O 36.3, CaO 5.7, MgO 6.4, and P_2O_5 49.3 per cent. In 1 sample protein (N×6.25) 11.4 and proteids 10.8 per cent.

b The ash of 1 sample contained K_2O 38.5, CaO 5.6, MgO 4.4, P_2O_5 48.1, and SO_3 0.2 per cent. In 1 sample protein (N × 6.25) 10.6 and proteids 10.3 per cent.

c The ash of 1 sample contained K_2O 32.3, CaO 4.5, MgO 9.3, and P_2O_5 53.1 per cent. In 1 sample protein (N × 6.25) 14.1 and proteids 13.8 per cent.

d Three samples contained an average of starch 70.8, dextrin 1.5, and sugar, etc., 1.8 per cent.

e Four samples contained an average of starch 71.9, dextrin 2.3, and sugar, etc., 1.6 per cent.

f Three samples contained an average of starch 71.8, dextrin 2, and sugar, etc., 1.7 per cent.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
FLOURS, MEALS, ETC.—continued.									
Wheat preparations, breakfast foods: *a*									
Cracked and crushed—*b*		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	11	.....	8.9	9.5	1.3	73.7	*1.2*	1.4	1,645
Maximum	11	.....	11.7	12.9	2.2	77.2	*2.0*	2.2	1,710
Average	**11**	.....	**10.1**	**11.1**	**1.7**	**75.5**	(7)*1.7*	**1.6**	**1,685**
Farina—*c*									
Minimum	9	.....	6.1	10.4	.8	74.6	*.2*	.1	1,630
Maximum	9	.....	13.2	11.7	3.8	78.5	*.6*	.7	1,825
Average	**9**	.....	**10.9**	**11.0**	**1.4**	**76.3**	(7)*.4*	**.4**	**1,685**
Flaked—*d*									
Minimum	7	.....	7.9	9.7	1.1	69.7	*1.3*	1.2	1,640
Maximum	7	.....	10.1	15.6	1.5	77.8	*2.2*	3.3	1,705
Average	**7**	.....	**8.7**	**13.4**	**1.4**	**74.3**	*1.8*	**2.2**	**1,690**
Germs—*d*									
Minimum	10	.....	9.1	8.6	1.2	73.1	*.3*	.5	1,665
Maximum	10	.....	12.3	13.4	2.5	80.0	*1.2*	1.6	1,720
Average	**10**	.....	**10.4**	**10.5**	**2.0**	**76.0**	(8)*.9*	**1.1**	**1,695**
Glutens—*e*									
Minimum	3	.....	6.8	12.7	.7	69.2	*.5*	.7	1,695
Maximum	3	.....	11.1	14.4	3.3	78.8	*2.5*	2.0	1,730
Average	**3**	.....	**8.9**	**13.6**	**1.7**	**74.6**	*1.3*	**1.2**	**1,715**
Miscellaneous—*f*									
Minimum	22	.....	3.8	10.4	1.3	70.5	*.5*	.9	1,665
Maximum	22	.....	11.9	16.6	4.0	81.0	*1.6*	1.8	1,820
Average	**22**	.....	**9.4**	**13.1**	**2.1**	**74.1**	(16)*.9*	**1.3**	**1,710**
Parched and toasted—*g*									
Minimum	6	.....	6.4	11.8	.9	72.3	*.1*	.2	1,660
Maximum	6	.....	11.5	15.5	3.7	76.9	*1.4*	1.6	1,800
Average	**6**	.....	**8.6**	**13.6**	**2.4**	**74.5**	*.8*	**.9**	**1,740**
Shredded—									
Minimum	6	.....	7.2	9.6	1.3	75.0	.....	1.4	1,670
Maximum	6	.....	10.7	11.4	1.6	79.7	.....	3.3	1,720
Average	**6**	.....	**8.1**	**10.5**	**1.4**	**77.9**	(3)*1.7*	**2.1**	**1,700**
All analyses, average	**74**	.....	**9.6**	**12.1**	**1.8**	**75.2**	*1.0*	**1.3**	**1,700**
Wheat preparations:									
Macaroni—									
Minimum	11	.....	7.0	7.9	.0	67.2	.....	.3	1,540
Maximum	11	.....	12.3	16.6	4.9	78.4	.....	7.0	1,775
Average	**11**	.....	**10.3**	**13.4**	**.9**	**74.1**	.....	**1.3**	**1,665**
Macaroni, cooked	1	.....	78.4	3.0	1.5	15.8	.....	1.3	415
Noodles—									
Minimum	2	.....	10.6	11.7	.5	74.7	*.3*	.5	1,665
Maximum	2	.....	10.7	11.7	1.5	76.6	*.4*	1.5	1,670
Average	**2**	.....	**10.7**	**11.7**	**1.0**	**75.6**	*.4*	**1.0**	**1,665**
Spaghetti—									
Minimum	3	.....	10.0	11.2	.1	74.9	*.5*	.6	1,645
Maximum	3	.....	11.1	13.3	.8	77.1	*.7*	.7	1,680
Average	**3**	.....	**10.6**	**12.1**	**.4**	**76.3**	(2)*.4*	**.6**	**1,660**
Vermicelli—									
Minimum	15	.....	9.4	7.9	.3	66.7	.....	.5	1,540
Maximum	15	.....	12.3	16.4	5.2	76.5	.....	6.8	1,730
Average	**15**	.....	**11.0**	**10.9**	**2.0**	**72.0**	.....	**4.1**	**1,625**
BREAD, CRACKERS, PASTRY, ETC.									
Bread, brown, as purchased:									
Minimum	2	.....	40.0	5.0	1.2	43.6	.....	1.9	970
Maximum	2	.....	47.2	5.8	2.4	50.7	.....	2.2	1,135
Average	**2**	.....	**43.6**	**5.4**	**1.8**	**47.1**	.....	**2.1**	**1,050**
Bread, cassava, as purchased	1	.....	10.5	9.1	.3	79.0	.....	1.1	1,650

a The different groups of wheat breakfast foods contain various brands, which have been arranged as far as possible according to similarity in method of preparation. The varieties under each group differ only slightly from the average in percentage composition.
b The ash of 2 samples contained an average of 0.282 per cent of phosphorus.
c The ash of 1 sample contained 0.153 per cent of phosphorus.
d The ash of 2 samples contained an average of 0.247 per cent of phosphorus.
e The ash of 1 sample contained 0.251 per cent of phosphorus.
f The ash of 4 samples contained an average of 0.35 per cent of phosphorus.
g The ash of 1 sample contained 0.288 per cent of phosphorus.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
BREAD, CRACKERS, PASTRY, ETC.—continued.									
Bread, corn (johnnycake), as purchased: *a*		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	5	.....	28.4	6.5	2.3	40.3	.....	0.8	975
Maximum	5	.....	48.0	10.1	9.8	54.3	.....	4.1	1,330
Average	**5**	.....	**38.9**	**7.9**	**4.7**	**46.3**	.....	**2.2**	**1,205**
Bread, rye, as purchased:									
Minimum	21	.....	20.6	6.4	.1	45.6	*.1*	.6	1,020
Maximum	21	.....	44.0	11.1	1.4	65.8	*1.0*	2.7	1,440
Average	**21**	.....	**35.7**	**9.0**	**.6**	**53.2**	(9) *.5*	**1.5**	**1,180**
Bread, rye, black, as purchased	1	.....	36.9	9.6	.6	48.9	.....	4.0	1,115
Bread, rye, whole, as purchased:									
Minimum	2	.....	49.8	11.8	.5	35.0	*.8*	.9	895
Maximum	2	.....	51.6	12.0	.6	36.8	*1.6*	1.0	930
Average	**2**	.....	**50.7**	**11.9**	**.6**	**35.9**	*1.2*	**.9**	**915**
Bread, rye and wheat, as purchased	1	.....	35.3	11.9	.3	51.5	.....	1.0	1,190
Bread, wheat:									
Buns, as purchased	1	.....	29.0	6.3	6.5	57.3	*.4*	.9	1,455
Buns, cinnamon, as purchased	1	.....	23.6	9.4	7.2	59.1	.....	.7	1,575
Buns, currant, as purchased	1	.....	27.5	6.7	7.6	57.6	*1.1*	.6	1,515
Buns, hot cross, as purchased	1	.....	36.7	7.9	4.8	49.7	.....	.9	1,275
Buns, sugar, as purchased: *b*									
Minimum	3	.....	26.6	7.6	4.5	49.0	.....	.8	1,340
Maximum	3	.....	35.3	8.4	9.4	58.5	.....	1.6	1,575
Average	**3**	.....	**29.6**	**8.1**	**6.9**	**54.2**	(1) *.3*	**1.2**	**1,450**
Gluten bread, as purchased—									
Minimum	6	.....	34.8	8.2	.7	44.6	.....	.8	1,085
Maximum	6	.....	43.1	11.1	2.4	53.0	.....	2.2	1,210
Average	**6**	.....	**38.2**	**9.3**	**1.4**	**49.8**	.....	**1.3**	**1,160**
Graham bread, as purchased—*c*									
Minimum	27	.....	27.8	6.8	.4	38.6	*.6*	.7	880
Maximum	27	.....	42.4	10.9	3.8	59.1	*1.8*	3.0	1,350
Average	**27**	.....	**35.7**	**8.9**	**1.8**	**52.1**	(11) *1.1*	**1.5**	**1,210**
Biscuit, homemade, as purchased—*d*									
Minimum	3	.....	30.7	7.8	2.0	53.7	*.4*	.1	1,280
Maximum	3	.....	34.7	10.2	3.3	56.6	*.9*	.9	1,325
Average	**3**	.....	**32.9**	**8.7**	**2.6**	**55.3**	(2) *.7*	**.5**	**1,300**
Biscuit, Maryland, as purchased—*e*									
Minimum	2	.....	24.2	7.5	4.3	59.3	*.6*	1.2	1,490
Maximum	2	.....	25.0	9.3	6.8	61.0	*2.1*	1.4	1,530
Average	**2**	.....	**24.6**	**8.4**	**5.6**	**60.1**	*1.3*	**1.3**	**1,510**
Biscuit, soda, as purchased	1	.....	22.9	9.3	13.7	52.6	.....	1.5	1,730
Rolls, French, as purchased—*f*									
Minimum	2	.....	31.9	8.0	2.3	55.2	*.3*	1.2	1,290
Maximum	2	.....	32.2	9.0	2.7	56.2	*.9*	1.3	1,310
Average	**2**	.....	**32.0**	**8.5**	**2.5**	**55.7**	*.6*	**1.3**	**1,300**
Rolls, plain, as purchased—									
Minimum	5	.....	18.4	8.6	.4	56.7	*.3*	.7	1,340
Maximum	5	.....	28.4	11.9	9.4	64.7	*.3*	1.4	1,635
Average	**5**	.....	**25.2**	**9.7**	**4.2**	**59.9**	(2) *.3*	**1.0**	**1,470**
Rolls, Vienna, as purchased	1	.....	31.7	8.5	2.2	56.5	*.4*	1.1	1,300
Rolls, water, as purchased—									
Minimum	2	.....	31.2	8.5	2.0	52.5	.....	1.1	1,300
Maximum	2	.....	34.0	9.6	3.9	55.8	.....	1.4	1,300
Average	**2**	.....	**32.6**	**9.0**	**3.0**	**54.2**	.....	**1.2**	**1,300**
Rolls, all analyses, as purchased	**20**	.....	**29.2**	**8.9**	**4.1**	**56.7**	(12) *.6*	**1.1**	**1,395**
Rolls, large cheap, as purchased	1	.....	29.4	9.4	.8	59.4	.....	1.0	1,315
Toasted bread, as purchased—									
Minimum	5	.....	15.3	10.6	.6	56.7	.....	1.4	1,340
Maximum	5	.....	28.6	12.8	3.2	67.1	.....	2.0	1,620
Average	**5**	.....	**24.0**	**11.5**	**1.6**	**61.2**	.....	**1.7**	**1,420**
White bread, biscuit, as purchased—									
Minimum	3	.....	31.2	7.6	.6	50.1	*.3*	.5	1,110
Maximum	3	.....	39.7	8.3	2.1	58.8	*.3*	1.4	1,295
Average	**3**	.....	**35.2**	**8.0**	**1.4**	**54.3**	(2) *.3*	**1.1**	**1,220**

a Corn bread (johnnycake), made of Indian meal mixed with sour milk or buttermilk.
b One sample contained sugar 7.9, dextrin 3.2, and starch 47 per cent.
c Two samples contained an average of sugar 3.2, dextrin 3.1, and starch 40.8 per cent.
d Two samples contained an average of sugar 2.7, dextrin 5.5, and starch 41.5 per cent.
e One sample contained sugar 3.9, dextrin 2.8, and starch 52.2 per cent.
f One sample contained sugar 2.9, dextrin 2.8, and starch 48.6 per cent.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
BREAD, CRACKERS, PASTRY, ETC.—continued.									
Bread, wheat—Continued.		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
White bread, butter, as purchased	1	.....	32.2	7.9	1.1	57.7	0.4	1.1	1,265
White bread, cheap grade, as purchased—									
Minimum	6	.....	27.9	8.7	.5	44.3	.....	1.0	1,105
Maximum	6	.....	40.7	16.3	2.1	60.4	.....	1.3	1,370
Average	**6**	.....	**33.2**	**10.9**	**1.3**	**53.6**	.....	**1.0**	**1,255**
White bread, cream, as purchased—									
Minimum	6	.....	29.3	6.5	.2	50.8	.....	.8	1,150
Maximum	6	.....	38.2	15.4	1.9	60.9	*.2*	1.6	1,335
Average	**6**	.....	**33.2**	**9.8**	**.9**	**55.0**	(1) *.2*	**1.1**	**1,245**
White bread, home-made, as purchased—									
Minimum	38	.....	29.8	6.8	.4	47.6	*.1*	.4	1,115
Maximum	38	.....	40.4	11.0	3.5	58.0	*.3*	2.0	1,360
Average	**38**	.....	**35.0**	**9.1**	**1.6**	**53.3**	(2) *.2*	**1.0**	**1,225**
White bread, milk, as purchased—									
Minimum	8	.....	34.1	8.8	.3	49.0	.....	.9	1,110
Maximum	8	.....	39.8	10.8	2.8	53.7	.....	2.0	1,235
Average	**8**	.....	**36.5**	**9.6**	**1.4**	**51.1**	.....	**1.4**	**1,190**
White bread, miscellaneous, as purchased *a*—									
Minimum	103	.....	25.8	7.0	.0	42.0	*.3*	.6	940
Maximum	103	.....	49.1	13.9	3.7	61.5	*.9*	3.0	1,415
Average	**103**	.....	**35.6**	**9.3**	**1.2**	**52.7**	(8) *.5*	**1.2**	**1,205**
White bread, New England, as purchased—									
Minimum	7	.....	33.1	8.5	.6	48.8	.....	.8	1,095
Maximum	7	.....	40.5	9.9	2.1	55.3	.....	1.3	1,245
Average	**7**	.....	**36.6**	**9.1**	**1.2**	**52.1**	.....	**1.0**	**1,190**
White bread, Quaker, as purchased—									
Minimum	4	.....	31.1	7.0	.8	49.1	*.2*	.9	1,230
Maximum	4	.....	40.4	9.8	1.8	58.1	*.3*	1.3	1,305
Average	**4**	.....	**35.8**	**8.3**	**1.1**	**53.7**	(3) *.3*	**1.1**	**1,200**
White bread, split, as purchased—									
Minimum	3	.....	33.2	9.0	.6	52.4	.....	.8	1,200
Maximum	3	.....	35.4	9.6	1.5	56.2	.....	1.3	1,245
Average	**3**	.....	**34.6**	**9.3**	**1.0**	**54.1**	(1) *.2*	**1.0**	**1,220**
White bread, Vienna, as purchased—									
Minimum	25	.....	27.1	8.1	.1	48.4	*.2*	.9	1,110
Maximum	25	.....	39.7	11.0	3.8	60.3	*.9*	1.5	1,380
Average	**25**	.....	**34.2**	**9.4**	**1.2**	**54.1**	(9) *.5*	**1.1**	**1,230**
White bread, all analyses, as purchased, average *b*	**198**	.....	**35.3**	**9.2**	**1.3**	**53.1**	(27) *.5*	**1.1**	**1,215**
Whole wheat bread, as purchased—									
Minimum	12	.....	32.3	8.1	.4	37.2	.....	.8	895
Maximum	12	.....	51.0	11.7	2.7	56.2	.....	1.9	1,260
Average	**12**	.....	**38.4**	**9.7**	**.9**	**49.7**	(1) *1.2*	**1.3**	**1,140**
Zwieback, as purchased—									
Minimum	4	.....	5.0	8.6	8.1	72.1	.....	.8	1,915
Maximum	4	.....	7.7	11.7	11.3	74.2	.....	1.0	2,015
Aggregate	**4**	.....	**5.8**	**9.8**	**9.9**	**73.5**	.....	**1.0**	**1,970**
Crackers:									
Boston (split) crackers, as purchased—									
Minimum	2	.....	6.8	10.7	7.1	68.8	.....	1.4	1,875
Maximum	2	.....	8.2	11.3	9.9	73.4	*.8*	2.4	1,895
Average	**2**	.....	**7.5**	**11.0**	**8.5**	**71.1**	(1) *.8*	**1.9**	**1,885**

a Four samples contained an average of sugar 2.3, dextrin 4.2, and starch 48.2 per cent.
b Table of comparison of bread made from different grades of flour, from high to low grade:

	Water.	Protein.	Fat.	Carbohydrates.	Fiber.	Ash.	Fuel value per pound.
	Per ct.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Calories.*
White bread from high-grade patent flour	32.9	8.7	1.4	56.5	.....	0.5	1,270
White bread from regular patent flour	34.1	9.0	1.3	54.9	.....	.7	1,245
White bread from baker's flour	39.1	10.6	1.2	48.3	.....	.9	1,145
White bread from low-grade flour	40.7	12.6	1.1	44.3	.....	1.3	1,105

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
BREAD, CRACKERS, PASTRY, ETC.—continued.									
Crackers—Continued.									
Butter crackers, as purchased—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	3	.....	5.2	9.2	8.0	76.3	*0.3*	0.9	1,840
Maximum	3	.....	9.5	11.2	13.6	69.4	*.4*	2.5	2,250
Average	**3**	.....	**7.2**	**9.6**	**10.1**	**71.6**	(2) *.4*	**1.5**	**1,935**
Cream crackers, as purchased—									
Minimum	9	.....	4.3	8.6	10.7	68.0	*.2*	1.1	1,945
Maximum	9	.....	8.9	11.2	13.8	72.4	*1.1*	2.6	2,080
Average	**9**	.....	**6.8**	**9.7**	**12.1**	**69.7**	(5) *.6*	**1.7**	**1,990**
Egg crackers, as purchased—									
Minimum	2	.....	5.4	12.4	11.9	63.7	*.3*	.8	2,100
Maximum	2	.....	6.3	12.8	16.0	69.5	*.5*	1.2	2,025
Average	**2**	.....	**5.8**	**12.6**	**14.0**	**66.6**	*.4*	**1.0**	**2,060**
Flatbread, as purchased—									
Minimum	3	.....	9.4	13.5	.2	72.7	.....	.5	1,660
Maximum	3	.....	10.5	15.6	.7	75.3	.....	1.5	1,675
Average	**3**	.....	**9.8**	**14.9**	**.5**	**73.6**	.....	**1.2**	**1,665**
Graham crackers, as purchased—									
Minimum	4	.....	3.1	7.4	1.1	69.7	*.6*	1.2	1,705
Maximum	4	.....	8.4	14.4	13.6	77.2	*2.4*	1.9	2,050
Average	**4**	.....	**5.4**	**10.0**	**9.4**	**73.8**	(2) *1.5*	**1.4**	**1,955**
Miscellaneous, as purchased—									
Minimum	21	.....	3.1	7.1	.5	63.5	*.1*	.4	1,840
Maximum	21	.....	11.8	14.2	12.8	82.2	*.9*	3.7	2,010
Average	**21**	.....	**7.1**	**10.2**	**8.8**	**72.4**	(17) *.4*	**1.5**	**1,905**
Oatmeal crackers, as purchased—									
Minimum	2	.....	4.9	10.4	8.5	68.3	.....	1.4	1,870
Maximum	2	.....	7.8	13.1	13.7	69.6	.....	2.3	2,065
Average	**2**	.....	**6.3**	**11.8**	**11.1**	**69.0**	(1) *1.9*	**1.8**	**1,970**
Oyster crackers, as purchased—									
Minimum	7	.....	3.8	9.1	4.8	69.1	.....	.9	1,855
Maximum	7	.....	6.5	17.3	13.0	77.5	.....	5.9	2,655
Average	**7**	.....	**4.8**	**11.3**	**10.5**	**70.5**	(1) *.2*	**2.9**	**1,965**
Pilot bread, as purchased—									
Minimum	3	.....	7.9	10.4	.5	70.3	*.3*	.9	1,665
Maximum	3	.....	9.9	12.4	10.2	78.0	*.3*	1.1	1,930
Average	**3**	.....	**8.7**	**11.1**	**5.0**	**74.2**	(2) *.3*	**1.0**	**1,800**
Pretzels, as purchased—									
Minimum	2	.....	8.1	9.1	3.9	71.1	*.4*	3.2	1,655
Maximum	2	.....	11.0	10.3	3.9	74.5	*.5*	4.9	1,740
Average	**2**	.....	**9.6**	**9.7**	**3.9**	**72.8**	(2) *.5*	**4.0**	**1,700**
Saltines, as purchased—									
Minimum	2	.....	4.6	9.9	12.7	67.1	*.3*	2.3	1,995
Maximum	2	.....	6.7	11.2	12.8	69.9	*.6*	2.8	2,025
Average	**2**	.....	**5.6**	**10.6**	**12.7**	**68.5**	*.5*	**2.6**	**2,005**
Soda crackers, as purchased—									
Minimum	5	.....	3.7	8.8	7.7	70.5	.....	1.8	1,850
Maximum	5	.....	8.4	10.7	10.0	75.4	.....	2.6	1,980
Average	**5**	.....	**5.9**	**9.8**	**9.1**	**73.1**	(1) *.3*	**2.1**	**1,925**
Water crackers, as purchased—									
Minimum	6	.....	4.7	10.4	.2	72.9	*.2*	.5	1,730
Maximum	6	.....	9.5	12.5	10.1	80.8	*.8*	2.0	1,910
Average	**6**	.....	**6.4**	**11.7**	**5.0**	**75.7**	*.4*	**1.2**	**1,835**
All analyses, as purchased, average	**71**	.....	**6.8**	**10.7**	**8.8**	**71.9**	(45) *.5*	**1.8**	**1,905**
Cracker meal, as purchased—									
Minimum	2	.....	9.2	9.6	.6	68.3	*.1*	.5	1,690
Maximum	2	.....	9.3	12.2	11.3	77.4	*.3*	1.6	1,925
Average	**2**	.....	**9.2**	**10.9**	**6.0**	**72.9**	*.2*	**1.0**	**1,810**
Cake:									
Baker's cake, as purchased—									
Minimum	2	.....	28.3	4.6	3.4	53.3	.....	.7	1,285
Maximum	2	.....	34.4	8.0	5.9	60.5	.....	.9	1,460
Average	**2**	.....	**31.4**	**6.3**	**4.6**	**56.9**	.....	**.8**	**1,370**
Chocolate layer cake, as purchased	**1**	.....	**20.5**	**6.2**	**8.1**	**64.1**	.....	**1.1**	**1,650**
Coffee cake, as purchased—									
Minimum	5	.....	11.0	4.9	4.7	52.4	*.2*	.6	1,395
Maximum	5	.....	32.0	9.0	10.5	78.8	*.6*	1.1	1,820
Average	**5**	.....	**21.3**	**7.1**	**7.5**	**63.2**	(4) *.4*	**.9**	**1,625**
Cup cake, as purchased—									
Minimum	2	.....	14.8	5.2	2.5	63.2	.....	.8	1,600
Maximum	2	.....	16.3	6.6	15.6	73.8	.....	1.2	1,920
Average	**2**	.....	**15.6**	**5.9**	**9.0**	**68.5**	(1) *.3*	**1.0**	**1,765**

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
BREAD, CRACKERS, PASTRY, ETC.—continued.									
Cake—Continued.		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Drop cake, as purchased	1	.....	**16.6**	**7.6**	**14.7**	**60.3**	*0.1*	**0.8**	**1,885**
Frosted cake, as purchased—									
Minimum	7	.....	11.4	5.0	7.5	58.3	.....	1.0	1,545
Maximum	7	.....	26.5	7.5	10.6	71.0	.....	3.4	1,835
Average	7	.....	**18.2**	**5.9**	**9.0**	**64.8**	.....	**2.1**	**1,695**
Fruit cake, as purchased—									
Minimum	4	.....	14.4	4.8	9.3	60.9	.....	1.4	1,720
Maximum	4	.....	18.4	6.7	12.6	67.5	.....	2.2	1,790
Average	4	.....	**17.3**	**5.9**	**10.9**	**64.1**	.....	**1.8**	**1,760**
Gingerbread, as purchased—									
Minimum	2	.....	16.1	5.4	8.4	62.3	.....	1.5	1,630
Maximum	2	.....	21.5	6.3	9.5	64.7	*.9*	4.3	1,705
Average	2	.....	**18.8**	**5.8**	**9.0**	**63.5**	(1)*.9*	**2.9**	**1,670**
Miscellaneous, as purchased—									
Minimum	4	.....	12.0	5.1	6.7	53.6	.....	1.1	1,380
Maximum	4	.....	33.2	7.1	14.7	64.7	.....	2.3	1,940
Average	4	.....	**21.9**	**5.9**	**10.6**	**60.1**	.....	**1.5**	**1,675**
Sponge cake, as purchased—									
Minimum	3	.....	6.3	5.7	6.4	57.3	.....	1.2	1,665
Maximum	3	.....	22.7	7.3	13.0	71.1	.....	2.5	1,995
Average	3	.....	**15.3**	**6.3**	**10.7**	**65.9**	.....	**1.8**	**1,795**
All analyses, except fruit, as purchased, average	27	.....	**19.9**	**6.3**	**9.0**	**63.3**	(7)*.4*	**1.5**	**1,675**
Cookies, cakes, etc.:									
Molasses cookies, as purchased *a*—									
Minimum	6	.....	4.0	6.0	3.9	70.3	.....	1.5	1,725
Maximum	6	.....	10.2	9.7	11.8	78.4	.....	3.0	1,995
Average	6	.....	**6.2**	**7.2**	**8.7**	**75.7**	.....	**2.2**	**1,910**
Miscellaneous cookies, as purchased—									
Minimum	5	.....	5.5	4.3	4.8	61.3	*.1*	.5	1,760
Maximum	5	.....	19.7	9.0	14.2	77.3	*.4*	2.3	1,955
Average	5	.....	**10.3**	**6.7**	**9.6**	**72.4**	*1.2*	**1.0**	**1,875**
Sugar cookies, as purchased *b*—									
Minimum	9	.....	4.3	4.5	4.8	69.1	*.3*	.6	1,715
Maximum	9	.....	13.3	8.0	16.7	84.4	*2.9*	3.4	2,135
Average	9	.....	**8.3**	**7.0**	**10.2**	**73.2**	(3)*1.1*	**1.3**	**1,920**
All analyses, as purchased, average	20	.....	**8.1**	**7.0**	**9.7**	**73.7**	*.5*	**1.5**	**1,910**
Fig biscuits or bars, as purchased	1	.....	17.9	4.6	6.6	69.8	*1.7*	1.1	1,660
Ginger snaps, as purchased—									
Minimum	7	.....	4.3	5.8	2.3	71.9	*.4*	1.8	1,695
Maximum	7	.....	9.7	7.3	15.4	80.8	*.9*	3.7	2,100
Average	7	.....	**6.3**	**6.5**	**8.6**	**76.0**	(5)*.7*	**2.6**	**1,895**
Lady fingers, as purchased—									
Minimum	3	.....	10.5	6.8	3.1	67.9	*.1*	.5	1,513
Maximum	3	.....	21.7	10.5	7.6	72.9	*.4*	.6	1,835
Average	3	.....	**15.0**	**8.8**	**5.0**	**70.6**	(2)*.2*	**.6**	**1,685**
Macaroons, as purchased—									
Minimum	4	.....	5.9	3.1	9.6	57.1	*.6*	.4	1,565
Maximum	4	.....	27.5	10.6	21.5	71.4	*1.8*	1.0	2,220
Average	4	.....	**12.3**	**6.5**	**15.2**	**65.2**	*1.1*	**.8**	**1,975**
Wafers, miscellaneous, as purchased—									
Minimum	5	.....	5.3	7.6	2.5	63.5	*.2*	.6	1,780
Maximum	5	.....	8.5	10.4	14.7	81.3	*.5*	2.9	1,995
Average	5	.....	**6.6**	**8.7**	**8.6**	**74.5**	*.4*	**1.6**	**1,910**
Wafers, vanilla, as purchased—									
Minimum	6	.....	4.8	5.6	6.4	65.0	*.1*	.5	1,850
Maximum	6	.....	9.3	2.8	19.6	77.9	*.4*	1.5	2,150
Average	6	.....	**6.7**	**6.6**	**14.0**	**71.6**	(5)*.3*	**1.1**	**2,045**
Wafers, all analyses, as purchased, average	11	.....	**6.6**	**7.6**	**11.6**	**72.9**	(10)*.3*	**1.3**	**1,985**
Miscellaneous cakes, as purchased—									
Minimum	17	.....	3.2	4.2	1.7	62.9	*.2*	.6	1,560
Maximum	17	.....	17.9	13.1	17.9	84.6	*.7*	1.9	2,060
Average	17	.....	**8.2**	**7.6**	**9.0**	**74.0**	(16)*.3*	**1.2**	**1,900**
Doughnuts, as purchased:									
Minimum	9	.....	11.0	5.1	16.4	45.8	*.6*	.3	1,795
Maximum	9	.....	25.8	7.6	25.7	63.2	*.8*	1.9	2,155
Average	9	.....	**18.3**	**6.7**	**21.0**	**53.1**	(2)*.7*	**.9**	**2,000**

a One sample contained sugar 32.4, dextrin 3.2, and starch 40.6 per cent.
b One sample contained sugar 25.2, dextrin 1.8, and starch 42.7 per cent.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
BREAD, CRACKERS, PASTRY, ETC.—continued.									
Jumbles, as purchased:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	4	.....	6.7	6.3	10.9	51.9	*0.2*	0.6	1,745
Maximum	4	.....	24.8	7.9	15.7	72.1	*1.0*	1.3	2,025
Average	**4**	.....	**14.3**	**7.4**	**13.5**	**63.7**	(3) *.5*	**1.1**	**1,890**
Pie, apple, as purchased:									
Minimum	4	.....	40.2	2.6	7.7	40.3	.....	.9	1,180
Maximum	4	.....	45.5	3.8	11.3	46.2	.....	2.8	1,320
Average	**4**	.....	**42.5**	**3.1**	**9.8**	**42.8**	.....	**1.8**	**1,270**
Pie, cream, as purchased:									
Minimum	3	.....	27.8	2.1	6.9	42.3	.....	.5	1,425
Maximum	3	.....	37.2	5.6	17.9	55.8	.....	1.5	1,580
Average	**3**	.....	**32.0**	**4.4**	**11.4**	**51.2**	.....	**1.0**	**1,515**
Pie, custard, as purchased	1	.....	62.4	4.2	6.3	26.1	.....	1.0	830
Pie, lemon, as purchased	1	.....	47.4	3.6	10.1	37.4	.....	1.5	1,190
Pie, mince, as purchased:									
Minimum	3	.....	34.1	4.5	9.7	30.4	.....	1.3	1,115
Maximum	3	.....	51.1	**7.5**	14.5	44.0	.....	4.4	1,535
Average	**3**	.....	**41.3**	**5.8**	**12.3**	**38.1**	.....	**2.5**	**1,335**
Pie, raisin, as purchased	1	.....	37.0	3.0	11.3	47.2	.....	1.5	1,410
Pie, squash, as purchased	1	.....	64.2	4.4	8.4	21.7	.....	1.3	840
Pudding, Indian meal, as purchased	1	.....	60.7	5.5	4.8	27.5	.....	1.5	815
Pudding, rice custard, as purchased	1	.....	59.4	4.0	4.6	31.4	.....	.6	825
Pudding, tapioca, as purchased:									
Minimum	3	.....	52.0	2.8	2.3	21.9	.....	.5	570
Maximum	3	.....	71.6	4.2	4.8	38.1	.....	.9	990
Average	**3**	.....	**64.5**	**3.3**	**3.2**	**28.2**	.....	**.8**	**720**
Pudding, tapioca, with apples, as purchased	1	.....	70.1	.3	.1	29.3	.....	.2	575
SUGARS, STARCHES, ETC.									
Candy, as purchased *a*	.....	.....	.....	.....	.....	96.0	.....	.....	1,785
Honey, as purchased: *b*									
Minimum	17	.....	14.3	.2	.....	77.3	.....	.1	1,450
Maximum	17	.....	21.8	1.1	.....	85.4	.....	.8	1,590
Average	**17**	.....	**18.2**	**.4**	.....	**81.2**	.....	**.2**	**1,520**
Molasses, cane, as purchased:									
Minimum	15	.....	19.0	(*c*)	.....	58.8	.....	.6	1,180
Maximum	15	.....	33.6	5.1	.2	76.7	.....	7.2	1,345
Average	**15**	.....	**25.1**	**2.4**	.....	**69.3**	.....	**3.2**	**1,290**
Starch, arrowroot, as purchased	1	.....	2.3	.....	.....	97.5	.....	.2	1,815
Starch, cornstarch, as purchased	.....	.....	.....	.....	.....	90.0	.....	.....	1,675
Starch, manioca, as purchased	1	.....	10.5	.5	.1	88.8	.....	.1	1,665
Starch, sago, as purchased	1	.....	12.2	9.0	.4	78.1	.....	.3	1,635

a Average composition of some common candies.

	Number of analyses.	Water.	Sucrose.	Invert sugar.	Ash.	Insoluble in cold water.	Remarks.
		Per ct.	*Per ct.*	*Per ct.*	*Per ct.*	*Per cent.*	
Broken candy	8	4.6	75 3	14.0	2.7	0.9 in one sample.	
Cream candy	20	5.3	77.1	8.7	.1	.2 in one sample.	
Marshmallows	3	5.6	33.3	24.1	1.1	27.0	One sample contained 44.8 per cent insoluble matter (starch and flour).
Caramels	3	3.3	37.5	15.2	1.4	32.2	One sample contained 66.3 per cent insoluble matter (starch and flour).
Chocolate creams	1	3.8	58.3	13.8	.5	15.4	

b Contained an average of cane sugar 2.8 and reducing sugar 71.1 per cent. The reducing sugar was composed of about equal amounts of glucose (dextrose) and fruit sugar (levulose).

c Nitrogenous matter, probably not proteids.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
SUGARS, STARCHES, ETC.—continued.									
Starch, tapioca, as purchased:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	7	.....	10.3	0.2	.....	86.6	*0.1*	.....	1,635
Maximum	7	.....	12.3	.6	0.3	89.0	*.2*	0.3	1,656
Average	**7**	.....	**11.4**	**.4**	**.1**	**88.0**	(5) *.1*	**.1**	**1,650**
Sugar, coffee or brown sugar, as purchased	328	.....	.....	.....	.....	95.0	.....	.....	1,765
Sugar, granulated sugar, as purchased	....	.....	.....	.....	.....	100.0	.....	.....	1,860
Sugar, maple, as purchased:									
Minimum	17	.....	.....	.....	.....	74.0	.....	.....	1,375
Maximum	17	.....	.....	.....	.....	95.2	.....	.....	1,770
Average	**17**	.....	.....	.....	.....	**82.8**	.....	.....	**1,540**
Sugar, powdered, as purchased	....	.....	.....	.....	.....	100.0	.....	.....	1,860
Sirup, maple, as purchased:									
Minimum	50	.....	.....	.....	.....	45.9	.....	.....	855
Maximum	50	.....	.....	.....	.....	81.9	.....	.....	1,525
Average	**50**	.....	.....	.....	.....	**71.4**	.....	.....	**1,330**
VEGETABLES. *a*									
Artichokes, as purchased: *b*									
Minimum	2	.....	77.5	2.2	.1	15.3	*.8*	.9	330
Maximum	2	.....	81.5	2.9	.2	18.3	*.9*	1.1	395
Average	**2**	.....	**79.5**	**2.6**	**.2**	**16.7**	*.8*	**1.0**	**365**
Asparagus, fresh, as purchased: *c*									
Minimum	3	.....	93.6	1.6	.2	3.6	*.7*	.5	100
Maximum	3	.....	94.3	2.1	.3	3.1	*.8*	1.0	110
Average	**3**	.....	**94.0**	**1.8**	**.2**	**3.3**	*.8*	**.7**	**105**
Asparagus, cooked, as purchased	1	.....	91.6	2.1	3.3	2.2	.....	.8	220
Beans, butter, green:									
Edible portion	1	.....	58.9	9.4	.6	29.1	.....	2.0	740
As purchased	1	50.0	29.4	4.7	.3	14.6	.....	1.0	370
Beans, dried, as purchased:									
Minimum	11	.....	9.6	19.9	1.4	57.2	*3.2*	2.7	1,540
Maximum	11	.....	15.5	26.6	3.1	63.5	*7.2*	4.4	1,690
Average	**11**	.....	**12.6**	**22.5**	**1.8**	**59.6**	(4) *4.4*	**3.5**	**1,605**
Beans, frijoles (New Mexico), as purchased:									
Minimum	4	.....	6.3	20.9	1.0	60.7	.....	4.0	1,625
Maximum	4	.....	9.9	24.4	1.5	66.9	.....	4.4	1,695
Average	**4**	.....	**7.5**	**21.9**	**1.3**	**65.1**	.....	**4.2**	**1,675**
Beans, Lima, dried, as purchased:									
Minimum	4	.....	8.3	12.8	.6	61.6	.....	3.6	1,600
Maximum	4	.....	12.2	24.5	1.9	70.1	.....	4.7	1,645
Average	**4**	.....	**10.4**	**18.1**	**1.5**	**65.9**	.....	**4.1**	**1,625**
Beans, Lima, fresh: *d*									
Edible portion	1	.....	68.5	7.1	.7	22.0	*1.7*	1.7	570
As purchased	....	55.0	30.8	3.2	.3	9.9	*.8*	.8	255
Beans, mesquite, dry, as purchased	1	.....	4.8	12.2	2.5	77.1	.....	3.4	1,765
Beans, string, cooked, edible portion	1	.....	95.3	.8	1.1	1.9	.....	.9	95
Beans, string, fresh: *e*									
Edible portion—									
Minimum	5	.....	83.5	1.7	.2	5.1	*1.2*	.7	165
Maximum	5	.....	91.7	2.8	.4	12.6	*2.6*	.9	300
Average	**5**	.....	**89.2**	**2.3**	**.3**	**7.4**	(2) *1.9*	**.8**	**195**
As purchased	....	7.0	83.0	2.1	.3	6.9	*1.8*	.7	180
Beets, cooked, edible portion	1	.....	88.6	2.3	.1	7.4	.....	1.6	185
Beets, fresh: *f*									
Edible portion—									
Minimum	24	.....	79.5	.9	.1	3.8	*.6*	.7	95
Maximum	24	.....	94.1	3.0	.2	16.3	*1.7*	2.0	365
Average	**24**	.....	**87.5**	**1.6**	**.1**	**9.7**	(18) *.9*	**1.1**	**215**
As purchased	....	20.0	70.0	1.3	.1	7.7	.....	.9	170

a Such vegetables as potatoes, squash, beets, etc., have a certain amount of inedible material, skin, seeds, etc. The amount varies with the method of preparing the vegetables, and can not be accurately estimated. The figures given for refuse of vegetables, fruits, etc., are assumed to represent approximately the amount of refuse in these foods as ordinarily prepared.

b In one sample, protein (N × 6.25) 2.2 and proteids 1.2 per cent.

c Two samples contained an average of 0.23 per cent free acid. Three samples contained an average protein (N × 6.25) 1.83 and proteids 0.94 per cent.

d Contained protein (N × 6.25) 7.1 and proteids 5.7 per cent.

e One sample contained free acid 0.49, protein (N × 6.25) 1.7, and proteids 0.87 per cent.

f The ash of 8 slamples contained an average of CaO 6.2, K_2O 44, MgO 3.1, P_2O_5 9.4, Na_2O 10.3, and Fe_2O_3 0.3 per cent. Seven samples contained an average of protein (N × 6.25) 1.6, and proteids 0.55 per cent.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
VEGETABLES—continued.									
Cabbage: *a*		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Edible portion—									
Minimum	16	.....	86.0	0.2	0.1	3.4	*0.5*	0.4	100
Maximum	16	.....	94.3	2.9	.7	8.0	*1.6*	2.4	225
Average	**16**	.....	**91.5**	**1.6**	**.3**	**5.6**	(8)*1.1*	**1.0**	**145**
As purchased	....	15.0	77.7	1.4	.2	4.8	.....	.9	125
Cabbage, curly, as purchased	1	.....	87.3	4.1	.6	6.2	.....	1.8	215
Cabbage sprouts:									
Edible portion	1	.....	88.2	4.7	1.1	4.3	.....	1.7	215
As purchased	1	61.8	33.7	1.8	.4	1.7	.....	.6	80
Carrots, fresh: *b*									
Edible portion—									
Minimum	18	.....	83.1	.7	.....	6.5	*.6*	.6	155
Maximum	18	.....	91.1	2.0	.7	13.8	*2.3*	1.6	295
Average	**18**	.....	**88.2**	**1.1**	**.4**	**9.3**	(15)*1.1*	**1.0**	**210**
As purchased	....	20.0	70.6	.9	.2	7.4	.....	.9	160
Carrots, cooked, edible portion	1	.....	3.5	7.7	3.6	80.3	.....	4.9	1,790
Cauliflower, as purchased: *c*									
Minimum	2	.....	90.8	1.6	.2	3.4	.....	.6	110
Maximum	2	.....	93.8	2.0	.8	6.0	.....	.8	175
Average	**2**	.....	**92.3**	**1.8**	**.5**	**4.7**	(1)*1.0*	**.7**	**140**
Celery:									
Edible portion—									
Minimum	5	93.0	93.1	1.0	.1	3.0	.....	.9	75
Maximum	5	.....	95.0	1.4	.2	4.6	.....	1.1	115
Average	**5**	.....	**94.5**	**1.1**	**.1**	**3.3**	.....	**1.0**	**85**
As purchased	....	20.0	75.6	.9	.1	2.6	.....	.8	70
Collards: *d*									
Edible portion—									
Minimum	2	.....	85.8	3.3	.5	6.2	.....	1.4	205
Maximum	2	.....	88.3	5.7	.7	6.5	.....	1.6	250
Average	**2**	.....	**87.1**	**4.5**	**.6**	**6.3**	.....	**1.5**	**225**
As purchased	1	55.3	39.5	1.5	.2	2.9	.....	.6	90
Corn, green: *e*									
Edible portion—									
Minimum	3	.....	72.1	2.8	1.0	14.1	.....	.7	360
Maximum	3	.....	81.3	3.7	1.1	22.6	.....	.8	530
Average	**3**	.....	**75.4**	**3.1**	**1.1**	**19.7**	(1)*.5*	**.7**	**470**
As purchased	....	61.0	29.4	1.2	.4	7.7	.....	.3	180
Cucumbers: *f*									
Edible portion—									
Minimum	4	.....	94.7	.5	.1	2.2	*.5*	.3	65
Maximum	4	.....	96.3	.9	.5	4.0	*.9*	.6	95
Average	**4**	.....	**95.4**	**.8**	**.2**	**3.1**	(2)*.7*	**.5**	**80**
As purchased	....	15.0	81.1	.7	.2	2.6	.....	.4	70
Eggplant, edible portion *g*	1	.....	92.9	1.2	.3	5.1	*.8*	.5	130
Greens, beet, cooked, as purchased	1	.....	89.5	2.2	3.4	3.2	.....	1.7	245
Greens, dandelion, as purchased	1	.....	81.4	2.4	1.0	10.6	.....	4.6	285
Greens, turnip-salad, as purchased:									
Minimum	2	.....	84.4	3.2	.5	5.5	.....	1.8	180
Maximum	2	.....	89.0	5.2	.8	7.1	.....	2.5	265
Average	**2**	.....	**86.7**	**4.2**	**.6**	**6.3**	.....	**2.2**	**220**
Kohl-rabi, edible portion: *h*									
Minimum	2	.....	90.9	1.7	.1	5.4	*1.1*	1.3	140
Maximum	2	.....	91.3	2.3	.1	5.6	*1.4*	1.3	145
Average	**2**	.....	**91.1**	**2.0**	**.1**	**5.5**	*1.3*	**1.3**	**145**

a The ash of 2 samples contained an average of CaO 4.7, MgO 1.9, P_2O_5 5.5, Na_2O 6.3, and K_2O 61.5 per cent. Five samples contained an average of protein (N × 6.25) 2.4 and proteids 1.4 per cent.

b The ash of 1 sample contained CaO 7.3, K_2O 53.7, MgO 2.8, P_2O_5 9.8, Na_2O 1.4, and Fe_2O_3 0.8 per cent. One sample contained protein (N×6.25) 1 and proteids 0.5 per cent. One sample contained cane sugar 3.6 and fruit sugar 3 per cent.

c One sample contained free acid 0.6, protein (N×6.25) 1.6, and proteids 1 per cent.

d One sample contained protein (N×6.25) 5.7 and proteids 2.9 per cent.

e One sample contained free acid 0.01, protein (N×6.25) 2.8, and proteids 2.2 per cent.

f One sample contained 0.02 per cent free acid. Two samples contained an average of protein (N×6.25) 0.8, and proteids 0.4 per cent.

g Contained free acid 0.01, protein (N×6.25) 1.2, and proteids 0.6 per cent.

h Two samples contained an average of protein (N×6.25) 2 and proteids 0.5 per cent.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
VEGETABLES—continued.									
Leeks:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Edible portion	1	.....	91.8	1.2	0.5	5.8	.....	0.7	150
As purchased	1	15.0	78.0	1.0	.4	5.0	*0.6*	.6	130
Lentils, dried, as purchased:									
Minimum	3	.....	6.4	24.5	.7	58.6	.....	3.2	1,595
Maximum	3	.....	10.7	26.6	1.5	59.8	.....	8.6	1,635
Average	**3**	.....	**8.4**	**25.7**	**1.0**	**59.2**	.....	**5.7**	**1,620**
Lettuce: *a*									
Edible portion—									
Minimum	8	.....	91.5	.7	.1	1.6	*.4*	.5	65
Maximum	8	.....	97.0	1.8	.6	4.9	*1.1*	1.2	150
Average	**8**	.....	**94.7**	**1.2**	**.3**	**2.9**	(7)*.7*	**.9**	**90**
As purchased	....	15.0	80.5	1.0	.2	2.5	.....	.8	75
Mushrooms, as purchased: *b*									
Minimum	11	.....	70.8	1.7	.2	2.4	*.1*	.7	90
Maximum	11	.....	94.4	6.0	.9	20.3	*2.0*	2.2	525
Average	**11**	.....	**88.1**	**3.5**	**.4**	**6.8**	(8)*.8*	**1.2**	**210**
Okra:									
Edible portion—									
Minimum	2	.....	87.4	1.2	.1	5.3	.....	.5	125
Maximum	2	.....	92.9	2.0	.4	9.5	.....	.7	230
Average	**2**	.....	**90.2**	**1.6**	**.2**	**7.4**	(1)*3.4*	**.6**	**175**
As purchased	....	12.5	78.9	1.4	.2	6.5	.....	.5	155
Onions, fresh: *c*									
Edible portion—									
Minimum	15	.....	81.5	.2	.1	4.2	*.7*	.1	90
Maximum	15	.....	95.2	4.4	.8	15.5	*1.3*	1.2	335
Average	**15**	.....	**87.6**	**1.6**	**.3**	**9.9**	(7)*.8*	**.6**	**225**
As purchased	....	10.0	78.9	1.4	.3	8.9	.....	.5	205
Onions, cooked, prepared, as purchased	1	.....	91.2	1.2	1.8	4.9	.....	.9	190
Onions, green (New Mexico):									
Edible portion—									
Minimum	2	.....	85.4	.8	.1	9.9	.....	.5	205
Maximum	2	.....	88.7	1.3	.2	12.4	.....	.7	265
Average	**2**	.....	**87.1**	**1.0**	**.1**	**11.2**	.....	**.6**	**230**
As purchased	....	51.0	42.6	.5	.1	5.5	.....	.3	115
Parsnips: *d*									
Edible portion—									
Minimum	3	.....	79.5	1.4	.2	8.5	.....	.7	190
Maximum	3	.....	89.2	1.9	.8	16.7	.....	1.9	375
Average	**3**	.....	**83.0**	**1.6**	**.5**	**13.5**	(1)*2.5*	**1.4**	**300**
As purchased	....	20.0	66.4	1.3	.4	10.8	.....	1.1	240
Peas, dried, as purchased:									
Minimum	8	.....	6.9	20.4	.8	58.0	*1.2*	2.2	1,570
Maximum	8	.....	15.0	28.0	1.3	67.4	*7.9*	4.3	1,670
Average	**8**	.....	**9.5**	**24.6**	**1.0**	**62.0**	(2)*4.5*	**2.9**	**1,655**
Peas, green: *e*									
Edible portion—									
Minimum	5	.....	71.6	4.4	.3	13.4	.....	.9	400
Maximum	5	.....	78.1	8.0	.6	18.9	.....	1.2	520
Average	**5**	.....	**74.6**	**7.0**	**.5**	**16.9**	(1)*1.7*	**1.0**	**465**
As purchased	....	*f*45.0	40.8	3.6	.2	9.8	.....	.6	255
Peas, green, cooked, as purchased	1	.....	73.8	6.7	3.4	14.6	.....	1.5	540
Peas, sugar, green, edible portion	1	.....	81.8	3.4	.4	13.7	*1.6*	.7	335
Cowpeas, dried, as purchased:									
Minimum	13	.....	10.0	19.3	1.1	53.1	*3.4*	2.9	1,450
Maximum	13	.....	20.9	23.0	1.6	65.4	*5.0*	3.8	1,650
Average	**13**	.....	**13.0**	**21.4**	**1.4**	**60.8**	*4.1*	**3.4**	**1,590**
Cowpeas, green, edible portion	1	.....	65.9	9.4	.6	22.7	.....	1.4	620

a The ash of 2 samples contained an average of CaO 5.1, K_2O 46.6, MgO 0.8, P_2O_5 5.3, and Na_2O 3.3 per cent. Five samples contained an average of protein (N×6.25) 1.4 and proteids 0.8 per cent.

b Eight samples contained an average of 3.1 protein (N×6.25) and 2.2 per cent proteids.

c The ash of 1 sample contained CaO 6.4, K_2O 30.2, MgO 2.9, and P_2O_5 12.4 per cent. Four samples contained an average of protein (N×6.25) 1.3 and proteids 0.6 per cent.

d One sample contained CaO 6, K_2O 42.2, MgO 3.1, P_2O_5 12.8, Na_2O 0.4, and Fe_2O_3 0.3 per cent.

e One sample contained protein (N×6.25) 4.4, and proteids 4.3 per cent.

f Refuse, pods.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
VEGETABLES—continued.									
Potatoes, raw or fresh: *a*									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	136	.....	67.8	1.1	.....	13.5	*0.2*	0.5	285
Maximum	136	.....	84.0	3.0	0.2	27.4	*.9*	1.9	570
Average	**136**	.....	**78.3**	**2.2**	**.1**	**18.4**	(53) *1.4*	**1.0**	**385**
As purchased	....	20.0	62.6	1.8	.1	14.7	.....	.8	310
Potatoes, evaporated, as purchased:									
Minimum	3	.....	4.8	7.3	.4	79.5	.....	2.7	1,640
Maximum	3	.....	8.7	9.5	.4	82.2	.....	3.6	1,725
Average	**3**	.....	**7.1**	**8.5**	**.4**	**80.9**	.....	**3.1**	**1,680**
Potatoes, cooked, boiled, as purchased: *b*									
Minimum	11	.....	69.7	1.8	.0	16.1	.....	.7	340
Maximum	11	.....	81.0	3.1	.4	26.5	.....	1.4	545
Average	**11**	.....	**75.5**	**2.5**	**.1**	**20.9**	(1) *.6*	**1.0**	**440**
Potatoes, cooked, chips, as purchased:									
Minimum	2	.....	1.8	6.0	35.5	42.7	.....	4.5	2,580
Maximum	2	.....	2.6	7.6	44.2	50.6	.....	4.5	2,770
Average	**2**	.....	**2.2**	**6.8**	**39.8**	**46.7**	.....	**4.5**	**2,675**
Potatoes, cooked, mashed, and creamed, as purchased:									
Minimum	4	.....	68.9	2.0	1.0	13.9	.....	1.1	420
Maximum	4	.....	78.0	3.6	4.5	22.4	.....	2.0	615
Average	**4**	.....	**75.1**	**2.6**	**3.0**	**17.8**	.....	**1.5**	**505**
Potatoes, sweet, raw, or fresh: *c*									
Edible portion—									
Minimum	95	.....	45.8	.4	.2	17.1	*.6*	.7	385
Maximum	95	.....	79.0	3.7	1.4	49.1	*4.6*	2.0	915
Average	**95**	.....	**69.0**	**1.8**	**.7**	**27.4**	(88) *1.3*	**1.1**	**570**
As purchased	....	20.0	55.2	1.4	.6	21.9	.....	.9	460
Potatoes, sweet, cooked and prepared, as purchased	1	.....	51.9	3.0	2.1	42.1	.....	.9	925
Pumpkins:									
Edible portion—									
Minimum	3	.....	92.3	.9	.1	3.9	*.9*	.6	95
Maximum	3	.....	94.4	1.1	.2	5.9	*1.1*	.7	135
Average	**3**	.....	**93.1**	**1.0**	**.1**	**5.2**	*1.2*	**.6**	**120**
As purchased	....	50.0	46.5	.5	.1	2.6	.....	.3	60
Radishes:									
Edible portion—									
Minimum	4	.....	86.6	.5	.0	3.4	*.7*	.7	85
Maximum	4	.....	94.8	3.0	.3	8.3	*.7*	1.8	225
Average	**4**	.....	**91.8**	**1.3**	**.1**	**5.8**	(2) *.7*	**1.0**	**135**
As purchased	....	30.0	64.3	.9	.1	4.0	.....	.7	95
Rhubarb: *d*									
Edible portion—									
Minimum	**2**	.....	92.7	.3	.1	2.9	.....	.6	65
Maximum	2	.....	96.1	.8	1.2	4.4	.....	.9	145
Average	**2**	.....	**94.4**	**.6**	**.7**	**3.6**	(1) *1.1*	**.7**	**105**
As purchased	....	40.0	56.6	.4	.4	2.2	.....	.4	65
Ruta-bagas: *e*									
Edible portion—									
Minimum	5	.....	87.1	.9	.1	6.2	*1.1*	.7	135
Maximum	5	.....	91.8	2.0	.3	10.3	*1.4*	1.4	220
Average	**5**	.....	**88.9**	**1.3**	**.2**	**8.5**	*1.2*	**1.1**	**190**
As purchased	....	30.0	62.2	.9	.1	6.0	.....	.8	135

a One sample contained 0.02 per cent free acid. In 4 samples the average amount of proteid nitrogen was 57 per cent of the total nitrogen. Twenty samples contained an average of 0.8 per cent malic acid, pectose substances, etc. The ash of 40 samples contained an average of CaO 1, K_2O 59.2, MgO 4.5, P_2O_5 13.8, Na_2O 4, and SO_3 6.5 per cent.

b One sample contained cane sugar 0.2, glucose 0.2, and starch 17.4 per cent.

c The edible portion of 26 samples contained an average of cane sugar 2.5 and invert sugar 3.4 per cent. Two samples contained, in the edible portion, an average of protein (N×6.25) 1.8 and proteids 1.3 per cent.

d The edible portion of 1 sample contained free acid 0.5, protein (N×6.25) 0.7, and proteids 0.4 per cent.

e The ash of the edible portion of 3 samples contained an average of CaO 9.4, K_2O 43.6, MgO 2.8, P_2O_5 11.7, Na_2O 10.2, and Fe_2O_3 0.5 per cent. One sample contained protein (N×6.25) 2 and proteids 0.9 per cent.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
VEGETABLES—continued.									
Sauerkraut, as purchased:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	86.3	1.5	0.2	3.3	.....	3.3	105
Maximum	2	.....	91.3	1.9	.8	4.4	.....	7.0	145
Average	**2**	.....	**88.8**	**1.7**	**.5**	**3.8**	.....	**5.2**	**125**
Spinach, fresh, as purchased: *a*									
Minimum	3	.....	91.6	1.8	.2	3.1	*0.7*	1.9	100
Maximum	3	.....	92.8	2.4	.5	3.4	*1.0*	2.4	120
Average	**3**	.....	**92.3**	**2.1**	**.3**	**3.2**	*.9*	**2.1**	**110**
Spinach, cooked, as purchased	1	.....	89.8	2.1	4.1	2.6	.....	1.4	260
Squash: *b*									
Edible portion—									
Minimum	10	.....	78.9	.6	.1	3.5	*.5*	.4	90
Maximum	10	.....	95.2	3.1	1.4	16.1	*1.2*	1 6	385
Average	**10**	.....	**88.3**	**1.4**	**.5**	**9.0**	(5) *.8*	**.8**	**215**
As purchased	....	50.0	44.2	.7	.2	4.5	.....	.4	105
Tomatoes, fresh, as purchased: *c*									
Minimum	27	.....	91.3	.3	.2	2.2	*.5*	.3	75
Maximum	27	.....	96.3	1.3	1.4	6.5	*1.2*	.8	160
Average	**27**	.....	**94.3**	**.9**	**.4**	**3.9**	(22) *.6*	**.5**	**105**
Tomatoes, dried, as purchased	1	.....	7.3	12.9	8.1	62.3	.....	9.4	1,740
Turnips: *d*									
Edible portion—									
Minimum	19	.....	70.1	.7	.1	2.8	*.8*	.5	100
Maximum	19	.....	95.7	3.9	.4	23.8	*3.2*	2.1	520
Average	**19**	.....	**89.6**	**1.3**	**.2**	**8.1**	(9) *1.3*	**.8**	**185**
As purchased	....	30.0	62.7	.9	.1	5.7	.....	.6	125
VEGETABLES, CANNED.									
Artichokes, as purchased:									
Minimum	3	.....	90.2	.5	.....	3.7	*.5*	1.4	85
Maximum	3	.....	93.9	1.0	.....	6.8	*.6*	2.2	140
Average	**3**	.....	**92.5**	**.8**	.....	**5.0**	*.6*	**1.7**	**110**
Asparagus, as purchased:									
Minimum	14	.....	92.9	.9	.0	2.2	*.4*	.8	70
Maximum	14	.....	95.4	2.4	.2	4.1	*.8*	1.8	120
Average	**14**	.....	**94.4**	**1.5**	**.1**	**2.8**	*.5*	**1.2**	**85**
Beans, baked, as purchased:									
Minimum	21	.....	59.9	5.1	.3	13.1	*1.3*	1.4	425
Maximum	21	.....	78.2	8.1	6.8	23.2	*4.5*	1.6	870
Average	**21**	.....	**68.9**	**6.9**	**2.5**	**19.6**	(12) *2.5*	**2.1**	**600**
Beans, string, as purchased:									
Minimum	29	.....	77.3	.6	.0	2.0	*.4*	.5	50
Maximum	29	.....	96.3	4.0	.5	13.5	*.8*	4.7	345
Average	**29**	.....	**93.7**	**1.1**	**.1**	**3.8**	(18) *.5*	**1.3**	**95**
Beans, little green, as purchased	1	.....	93.8	1.2	.1	3.4	*.6*	1.5	90
Beans, wax, as purchased	1	.....	94.6	1.0	.1	3.1	*.6*	1.2	80
Beans, haricots verts, as purchased:									
Minimum	7	.....	94.3	.9	.0	2.1	*.4*	.9	55
Maximum	7	.....	96.1	1.4	.3	3.0	*.5*	1.3	95
Average	**7**	.....	**95.2**	**1.1**	**.1**	**2.5**	*.5*	**1.1**	**70**
Beans, haricots flageolets, as purchased:									
Minimum	3	.....	80.4	4.0	.0	10.8	*1.0*	.9	280
Maximum	3	.....	83.9	5.2	.1	13.4	*1.0*	1.7	350
Average	**3**	.....	**81.6**	**4.6**	**.1**	**12.5**	*1.0*	**1.2**	**320**
Beans, haricots panaches, as purchased	1	.....	86.1	3.7	.....	9.2	*1.0*	1.0	240
Beans, Lima, as purchased:									
Minimum	16	.....	75.7	3.2	.2	10.5	*.9*	1.0	280
Maximum	16	.....	83.9	5.6	.6	17.9	*1.4*	2.6	445
Average	**16**	.....	**79.5**	**4.0**	**.3**	**14.6**	(15) *1.2*	**1.6**	**360**

a The ash of 2 samples contained an average of CaO 2.6, K_2O 39.9, MgO 2.2, P_2O_5 2.2, and Na_2O 9.4 per cent. One sample contained 0.01 per cent free acid. One sample contained protein (N×6.25) 2.1 and proteids 1.3 per cent.

b The edible portion of 2 samples contained an average of protein (N×6.25) 0.6 and proteids 0.5 per cent.

c The ash of 1 sample contained CaO 5.8, K_2O 68.1, MgO 3.7, and P_2O_5, 8.7 per cent. Six samples contained an average of protein (N×6.25) 0.8 and proteids 0.5 per cent.

d The ash of the edible portion of 4 samples contained an average of CaO 8.8, K_2O 43, MgO 2.7, P_2O_5 11.4, and Na_2O 8.3 per cent. One sample contained protein (N×6.25) 0.8 and proteids 0.2 per cent. One sample contained 4.4 per cent sugar.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
VEGETABLES, CANNED—continued.		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Beans, red kidney, as purchased *a*	1	.....	72.7	7.0	0.2	18.5	*1.2*	1.6	480
Brussels sprouts, as purchased	1	.....	93.7	1.5	.1	3.4	*.5*	1.3	95
Corn, green, as purchased: *b*									
Minimum	52	.....	68.3	2.0	.5	9.8	*.4*	.5	250
Maximum	52	.....	86.1	3.7	1.9	25.8	*1.2*	1.6	610
Average	**52**	.....	**76.1**	**2.8**	**1.2**	**19.0**	(43) *.8*	**.9**	**455**
Corn and tomatoes, as purchased:									
Minimum	2	.....	83.6	1.2	.4	6.4	*.4*	.5	160
Maximum	2	.....	91.5	2.1	.4	12.7	*.6*	1.2	295
Average	**2**	.....	**87.6**	**1.6**	**.4**	**9.6**	*.5*	**.8**	**225**
Macedoine (mixed vegetables), as purchased:									
Minimum	5	.....	91.5	.7	.....	2.3	*.4*	.8	55
Maximum	5	.....	95.9	1.7	.....	5.7	*.7*	1.2	135
Average	**5**	.....	**93.1**	**1.4**	.....	**4.5**	*.6*	**1.0**	**110**
Okra, as purchased: *c*									
Minimum	4	.....	94.0	.5	.0	3.3	*.4*	.3	75
Maximum	4	.....	94.9	.9	.2	3.9	*1.4*	1.7	95
Average	**4**	.....	**94.4**	**.7**	**.1**	**3.6**	*.7*	**1.2**	**85**
Okra and tomatoes, as purchased: *d*									
Minimum	3	.....	91.4	1.1	.2	4.8	*.4*	1.4	125
Maximum	3	.....	92.3	1.2	.3	5.7	*.6*	1.8	135
Average	**3**	.....	**91.8**	**1.1**	**.3**	**5.2**	*.5*	**1.6**	**130**
Peas, green, as purchased: *e*									
Minimum	88	.....	77.5	1.6	.0	4.9	*.6*	.3	130
Maximum	88	.....	92.7	6.1	.8	17.4	*1.5*	2.0	405
Average	**88**	.....	**85.3**	**3.6**	**.2**	**9.8**	(83) *1.2*	**1.1**	**255**
Potatoes, sweet, as purchased:									
Minimum	2	.....	42.0	1.3	.3	29.2	.....	.8	580
Maximum	2	.....	68.4	2.6	.5	53.6	.....	1.3	1,065
Average	**2**	.....	**55.2**	**1.9**	**.4**	**41.4**	(1) *.8*	**1.1**	**820**
Pumpkins, as purchased:									
Minimum	7	.....	88.2	.5	.1	4.7	*.6*	.4	100
Maximum	7	.....	94.3	1.2	.4	9.6	*1.5*	1.5	205
Average	**7**	.....	**91.6**	**.8**	**.2**	**6.7**	(5) *1.1*	**.7**	**150**
Squash, as purchased:									
Minimum	5	.....	85.6	.2	.1	8.2	*.3*	.2	185
Maximum	5	.....	89.9	1.6	1.2	13.9	*1.1*	.7	265
Average	**5**	.....	**87.6**	**.9**	**.5**	**10.5**	(2) *.7*	**.5**	**235**
Succotash, as purchased:									
Minimum	12	.....	71.4	2.9	.7	14.9	*.7*	.4	375
Maximum	12	.....	79.9	4.4	1.7	22.4	*1.1*	1.4	540
Average	**12**	.....	**75.9**	**3.6**	**1.0**	**18.6**	(10) *.9*	**.9**	**455**
Tomatoes, as purchased: *f*									
Minimum	19	.....	92.5	.3	.1	1.4	*.4*	.2	80
Maximum	19	.....	97.9	1.7	.3	8.1	*.7*	1.2	135
Average	**19**	.....	**94.0**	**1.2**	**.2**	**4.0**	(11) *.5*	**.6**	**105**
PICKLES, CONDIMENTS, ETC.									
Catsup, tomato, as purchased:									
Minimum	2	.....	77.7	1.1	.1	8.5	.....	2.5	185
Maximum	2	.....	87.8	2.0	.4	16.1	.....	3.8	355
Average	**2**	.....	**82.8**	**1.5**	**.2**	**12.3**	.....	**3.2**	**265**
Horse-radish, as purchased:									
Minimum	2	.....	85.4	1.2	.1	9.6	.....	1.5	210
Maximum	2	.....	87.5	1.6	.2	11.3	.....	1.6	245
Average	**2**	.....	**86.4**	**1.4**	**.2**	**10.5**	.....	**1.5**	**230**
Horse-radish, evaporated, as purchased	1	.....	4.3	11.0	.8	77.7	.....	6.2	1,685
Olives, green:									
Edible portion	1	.....	58.0	1.1	27.6	11.6	.....	1.7	1,400
As purchased	1	27.0	42.3	.8	20.2	8.5	.....	1.2	1,025
Olives, ripe:									
Edible portion	1	.....	64.7	1.7	25.9	4.3	.....	3.4	1,205
As purchased	1	19.0	52.4	1.4	21.0	3.5	.....	2.7	975
Peppers (paprica), green, dried, as purchased	1	.....	5.0	15.5	8.5	63.0	.....	8.0	1,820

a Shelled.
b Thirty-two samples contained an average of 0.4 per cent NaCl.
c Three samples contained an average of 1.1 per cent NaCl.
d Three samples contained an average of 1 per cent NaCl.
e Eighty samples contained an average of 0.7 per cent NaCl.
f Seven samples contained an average of 0.1 per cent Na Cl.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
PICKLES, CONDIMENTS, ETC.—continued.									
Peppers, red chili, as purchased: *a*		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	5	.....	3.9	8.2	6.3	67.3	.....	7.4	1,770
Maximum	5	.....	6.4	11.1	10.3	71.9	.....	8.0	1,895
Average	**5**	.....	**5.3**	**9.4**	**7.7**	**70.0**	.....	**7.6**	**1,800**
Pickles, cucumber, as purchased:									
Minimum	3	.....	89.0	.4	.1	1.3	.....	2.7	35
Maximum	3	.....	95.5	.7	.5	5.4	.....	4.6	130
Average	**3**	.....	**92.9**	**.5**	**.3**	**2.7**	.....	**3.6**	**70**
Pickles, mixed, as purchased	1	.....	93.8	1.1	.4	4.0	.....	.7	110
Pickles, spiced, as purchased	1	.....	77.1	.4	.1	20.7	.....	1.7	395
FRUITS, BERRIES, ETC., FRESH. *b*									
Apples: *c*									
Edible portion—									
Minimum	29	.....	77.3	.1	.1	8.8	*0.9*	.2	175
Maximum	29	.....	90.9	.8	1.4	21.3	*1.4*	.6	420
Average	**29**	.....	**84.6**	**.4**	**.5**	**14.2**	(7) *1.2*	**.3**	**290**
As purchased	....	25.0	63.3	.3	.3	10.8	.....	.3	220
Apricots: *d*									
Edible portion, average	**11**	.....	**85.0**	**1.1**	.....	**13.4**	.....	**.5**	**270**
As purchased	....	6.0	79.9	1.0	.....	12.6	.....	.5	255
Bananas, yellow: *e*									
Edible portion—									
Minimum	6	.....	66.3	1.0	.0	16.3	.....	.5	330
Maximum	6	.....	81.6	1.6	1.4	29.8	.....	1.1	640
Average	**6**	.....	**75.3**	**1.3**	**.6**	**22.0**	(1) *1.6*	**.8**	**460**
As purchased	....	35.0	48.9	.8	.4	14 3	.....	.6	300
Blackberries, as purchased: *f*									
Minimum	9	.....	78.4	.9	.5	7.5	.....	.4	245
Maximum	9	.....	88.9	1.5	2.9	16.7	.....	.9	455
Average	**9**	.....	**86.3**	**1.3**	**1.0**	**10.9**	(1) *2.5*	**.5**	**270**
Cherries: *g*									
Edible portion—									
Minimum	16	.....	76.9	.7	.8	11.4	.....	.5	320
Maximum	16	.....	86.1	1.1	.8	20.6	.....	1.0	430
Average	**16**	.....	**80.9**	**1.0**	**.8**	**16.7**	(1) *.2*	**.6**	**365**
As purchased	....	5.0	76.8	.9	.8	15.9	.....	.6	345
Cranberries, as purchased:									
Minimum	3	.....	87.6	.4	.4	9.3	*1.2*	.2	200
Maximum	3	.....	89.5	.5	.9	10.9	*1.7*	.2	245
Average	**3**	.....	**88.9**	**.4**	**.6**	**9.9**	(2) *1.5*	**.2**	**215**
Currants, as purchased	1	.....	85.0	1.5	.....	12.8	.....	.7	265
Figs, fresh, as purchased, average *h*	**28**	.....	**79.1**	**1.5**	.....	**18.8**	.....	**.6**	**380**
Grapes: *i*									
Edible portion, average	**5**	.....	**77.4**	**1.3**	**1.6**	**19.2**	(1) *4.3*	**.5**	**450**
As purchased	....	25.0	58.0	1.0	1.2	14.4	.....	.4	335
Huckleberries, edible portion	1	.....	81.9	.6	.6	16.6	.....	.3	345

a Refuse, seeds and stem.

b Fruits contain a certain proportion of inedible materials, as skin, seeds, etc., which are properly classed as refuse. In some fruits, as oranges and prunes, the amount rejected in eating is practically the same as the refuse. In others, as apples and pears, more or less of the edible material is ordinarily rejected with the skin and seeds and other inedible portions. The edible material which is thus thrown away, and should properly be classed with the waste, is here classed with the refuse. The figures for refuse here given represent, as nearly as can be ascertained, the quantities ordinarily rejected.

c The edible portion of 1 sample contained glucose 6.4, cane sugar 6, and starch, acids, etc., 1.2 per cent The edible portion of 1 sample contained protein (N×6.25) 0.6 and proteids 0.4 per cent.

d The edible portion of 1 sample contained 11.9 per cent sugar. The fat was not determined.

e The edible portion of 1 sample contained protein (N×6.25) 1.4 and proteids 1.2 per cent. The edible portion of 1 sample contained 0.1 per cent free acid.

f One sample contained protein (N×6.25) 0.9 and proteids 0.7 per cent.

g The ash of 1 sample contained CaO 4.2, K_2O 57.7, MgO 5.5, P_2O_5 15.1, Na_2O 6.8, and SO_3 5.8 per cent. The edible portion of 1 sample contained protein (N×6.25) 1.1 and proteids 0.4 per cent. The edible portion of 1 sample contained 0.1 per cent free acid. Six samples contained an average of 11 per cent sugar.

h The ash of 3 samples contained an average of CaO 2.4, K_2O 55.8, MgO 5.6, P_2O_5 12.4, and SO_3 3.9 per cent. Fat not determined.

i The ash of 5 samples contained an average of CaO 5, K_2O 50.9, MgO 3, P_2O_5 21.2, and SO_3 4.3 per cent.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
FRUITS, BERRIES, ETC., FRESH—continued.									
Lemons: *a*									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	4	.....	88.4	0.8	0.1	8.2	*0.9*	0.5	180
Maximum	4	.....	90.2	1.1	1.5	9.0	*1.3*	.5	240
Average	**4**	.....	**89.3**	**1.0**	**.7**	**8.5**	(2) *1.1*	**.5**	**205**
As purchased	....	30.0	62.5	.7	.5	5.9	.....	.4	145
Lemon juice	22	.....	.....	.....	.....	*b* 9.8	.....	.....	180
Muskmelons:									
Edible portion	1	.....	89.5	.6	.....	9.3	*2.1*	.6	185
As purchased	1	50.0	44.8	.3	.....	4.6	.....	.3	90
Nectarines: *c*									
Edible portion	1	.....	82.9	.6	.....	15.9	.....	.6	305
As purchased	1	6.6	77.4	.6	.....	14.8	.....	.6	285
Oranges: *d*									
Edible portion—									
Minimum	23	.....	80.0	1.1	.1	11.6	.....	.5	215
Maximum	23	.....	88.3	.8	.3	18.5	.....	.5	375
Average	**23**	.....	**86.9**	**.8**	**.2**	**11.6**	.....	**.5**	**240**
As purchased	....	27.0	63.4	.6	.1	8.5	.....	.4	170
Pears: *e*									
Edible portion—									
Minimum	2	.....	83.9	.6	.1	**14.1**	.....	.4	275
Maximum	2	.....	84.8	.6	.8	14.2	.....	.5	310
Average	**2**	.....	**84.4**	**.6**	**.5**	**14.1**	(1) *2.7*	**.4**	**295**
As purchased	....	10.0	76.0	.5	.4	12.7	.....	.4	260
Persimmons, edible portion *f*	1	.....	66.1	.8	.7	31.5	*1.8*	.9	630
Pineapple, edible portion *g*	1	.....	89.3	.4	.3	9.7	*.4*	.3	200
Plums: *h*									
Edible portion, average	**3**	.....	**78.4**	**1.0**	.....	**20.1**	.....	**.5**	**395**
As purchased	....	5.0	74.5	.9	.....	19.1	.....	.5	370
Pomegranates, edible portion: *i*									
Minimum	2	.....	75.4	1.3	1.2	18.5	*2.6*	.5	420
Maximum	2	.....	78.2	1.6	2.1	20.4	*2.8*	.8	495
Average	**2**	.....	**76.8**	**1.5**	**1.6**	**19.5**	*2.7*	**.6**	**460**
Prunes: *j*									
Edible portion, average	**24**	.....	**79.6**	**.9**	.....	**18.9**	.....	**.6**	**370**
As purchased	20	5.8	75.6	.7	.....	17.4	.....	.5	335
Raspberries, red, as purchased *k*	1	.....	85.8	1.0	.....	12.6	*2.9*	.6	255
Raspberries, black, edible portion:									
Minimum	3	.....	82.2	1.5	.....	11.7	.....	.4	245
Maximum	3	.....	86.4	2.1	1.7	13.6	.....	.7	350
Average	**3**	.....	**84.1**	**1.7**	**1.0**	**12.6**	.....	**.6**	**310**
Raspberry juice, edible portion	1	.....	49.3	.5	.....	*l* 49.9	.....	.3	935
Strawberries: *m*									
Edible portion—									
Minimum	22	.....	85.4	.6	.4	4.4	*.7*	.4	130
Maximum	22	.....	94.0	1.2	1.1	12.3	*2.3*	.9	235
Average	**22**	.....	**90.4**	**1.0**	**.6**	**7.4**	(19) *1.4*	**.6**	**180**
As purchased	....	5.0	85.9	.9	.6	7.0	.....	.6	175

a The ash of 2 samples contained an average of CaO 29.9, K_2O 48.3, MgO 4.4, P_2O_5 11.1, and SO_3 2.8 per cent. Two samples contained an average of protein (N×6.25) 0.9 and proteids 0.5 per cent.

b Sugar 2.3, citric acid 7.5 per cent.

c Fat not determined.

d The ash of 9 samples contained an average of CaO 22.7, K_2O 48.9, MgO 5.4, P_2O_5 12.4, and SO_3 5.2 per cent. Fat determined in 8 samples, the mean of these assumed to be an average. Eight samples contained an average of 9 per cent sugar.

e One sample contained protein (N×6.25) 0.6 and proteids 0.3 per cent.

f Contained glucose 13.5, cane sugar 1 per cent.

g Contained protein (N×6.25) 0.4 and proteids 0.1 per cent.

h The edible portion contained 13.2 per cent sugar. Fat not determined.

i Two samples contained an average of glucose 11, of cane sugar 0.7 per cent.

j The ash of the edible portion of 3 samples contained an average of CaO 4.7, K_2O 63.8, MgO 5.5, P_2O_5 14.1, and SO_3 2.7 per cent. Edible portion of 20 samples contained an average of 16.1 per cent sugar. Fat was not determined.

k Fat not determined.

l Probably sweetened.

m Four samples contained an average of protein (N×6.25) 0.7 and proteids 0.5 per cent. Fifteen samples contained an average of glucose 5.5 and free acid, calculated as malic acid, 1.4 per cent.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
FRUITS, BERRIES, ETC., FRESH—continued.									
Watermelons: *a*									
Edible portion—		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	92.0	0.3	0.1	6.5	.....	0.2	125
Maximum	2	.....	92.9	.6	.2	6.9	.....	.3	160
Average	**2**	.....	**92.4**	**.4**	**.2**	**6.7**	.....	**.3**	**140**
As purchased	....	59.4	37.5	.2	.1	2.7	.....	.1	60
Whortleberries, as purchased *b*	1	.....	82.4	.7	3.0	13.5	*3.2*	.4	390
FRUITS, ETC., DRIED.									
Apples, as purchased: *c*									
Minimum	3	.....	8.6	1.2	.1	48.6	.....	1.4	985
Maximum	3	.....	47.4	2.5	5.0	86.9	.....	2.7	1,630
Average	**3**	.....	**28.1**	**1.6**	**2.2**	**66.1**	.....	**2.0**	**1,350**
Apricots, as purchased: *d*									
Minimum	2	.....	26.4	2.9	1.0	62.7	.....	1.4	1,230
Maximum	2	.....	32.4	6.4	1.1	63.3	.....	3.4	1,330
Average	**2**	.....	**29.4**	**4.7**	**1.0**	**62.5**	.....	**2.4**	**1,290**
Citron, as purchased:									
Minimum	2	.....	12.4	.4	.6	72.5	.....	.8	1,380
Maximum	2	.....	25.6	.6	2.5	83.7	.....	.9	1,675
Average	**2**	.....	**19.0**	**.5**	**1.5**	**78.1**	.....	**.9**	**1,525**
Currants, Zante, as purchased:									
Minimum	4	.....	5.3	1.0	.4	60.0	.....	2.2	1,195
Maximum	4	.....	35.1	4.7	4.7	85.3	.....	9.1	1,690
Average	**4**	.....	**17.2**	**2.4**	**1.7**	**74.2**	.....	**4.5**	**1,495**
Dates:									
Edible portion—									
Minimum	2	.....	9.9	2.1	.6	70.4	.....	1.1	1,565
Maximum	2	.....	20.8	2.2	5.1	86.3	.....	1.5	1,670
Average	**2**	.....	**15.4**	**2.1**	**2.8**	**78.4**	.....	**1.3**	**1,615**
As purchased	....	10.0	13.8	1.9	2.5	70.6	.....	1.2	1,450
Figs, as purchased: *e*									
Minimum	3	.....	11.6	2.6	.3	68.3	.....	2.2	1,355
Maximum	3	.....	25.0	5.7	.3	83.1	.....	2.5	1,595
Average	**3**	.....	**18.8**	**4.3**	**.3**	**74.2**	.....	**2.4**	**1,475**
Grapes, ground, as purchased *f*	1	.....	34.8	2.8	.6	60.5	*3.7*	1.2	1,205
Pears, as purchased	1	.....	16.5	2.8	*g* 5.4	72.9	.....	2.4	1,635
Prunes: *h*									
Edible portion—									
Minimum	15	.....	16.9	1.4	.....	68.1	.....	1.5	1,340
Maximum	15	.....	27.5	3.2	.....	78.6	.....	3.0	1,500
Average	**15**	.....	**22.3**	**2.1**	.....	**73.3**	.....	**2.3**	**1,400**
As purchased	....	15.0	19.0	1.8	.....	62.2	.....	2.0	1,190
Raisins:									
Edible portion—									
Minimum	3	.....	7.1	2.3	.5	71.3	.....	2.0	1,540
Maximum	3	.....	21.0	3.0	7.2	78.8	.....	5.0	1,805
Average	**3**	.....	**14.6**	**2.6**	**3.3**	**76.1**	.....	**3.4**	**1,605**
As purchased	....	10.0	13.1	2.3	3.0	68.5	.....	3.1	1,445
Raspberries, as purchased	1	.....	8.1	7.3	1.8	80.2	.....	2.6	1,705
FRUITS, ETC., CANNED; AND JELLIES, PRESERVES, ETC.									
Apples, crab, as purchased	1	.....	42.4	.3	2.4	54.4	.....	.5	1,120
Apple sauce, as purchased	1	.....	61.1	.2	.8	37.2	.....	.7	730
Apricots, as purchased	1	.....	81.4	.9	.....	17.3	.....	.4	340
Apricot sauce, as purchased	1	.....	45.2	1.9	1.3	48.8	.....	2.8	1,000
Blackberries, as purchased	1	.....	40.0	.8	2.1	56.4	.....	.7	1,150

a In one melon the rind was 55.8 of the whole, the pulp 6.9, the seeds 2.2, and the juice 35.1 per cent. The edible portion of 1 sample contained protein (N×6.25) 0.9 and proteids 0.3 per cent.

b Contained protein (N×6.25) 0.7 and proteids 0.5 per cent.

c One sample contained 2 per cent free acid calculated as sulphuric acid.

d One sample contained 1.5 per cent free acid calculated as sulphuric acid.

e One sample contained 0.4 per cent free acid calculated as sulphuric acid.

f Contained 0.8 per cent free acid calculated as sulphuric acid and 1.3 per cent tannin.

g The percentage of fat given is evidently too high.

h Twelve samples contained an average of sugar 25.4 and free acid 0.3 per cent, calculated as sulphuric acid. Fat not determined.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued									
FRUITS, ETC., CANNED; AND JELLIES, PRESERVES, ETC.—continued.									
Blueberries, as purchased:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	3	.....	84.9	0.4	0.4	12.2	.....	0.2	260
Maximum	3	.....	86.4	.8	.9	13.8	.....	.5	280
Average	**3**	.....	**85.6**	**.6**	**.6**	**12.8**	.....	**.4**	**275**
Cherries, as purchased	1	.....	77.2	1.1	.1	21.1	.....	.5	415
Cherry jelly:									
1st quality, as purchased	1	.....	21.0	1.1	.....	77.2	.....	.7	1,455
2d quality, as purchased	1	.....	38.4	1.2	.....	59.8	.....	.6	1,135
Figs, stewed, as purchased	1	.....	56.5	1.2	.3	40.9	.....	1.1	785
Grape butter, as purchased	1	.....	36.7	1.2	.1	58.5	.....	3.5	1,115
Marmalade (orange peel), as purchased *a*	1	.....	14.5	.6	.1	84.5	.....	.3	1,585
Peaches, as purchased:									
Minimum	3	.....	81.4	.5	.....	5.3	.....	.3	115
Maximum	3	.....	93.7	.9	.2	17.3	.....	.4	340
Average	**3**	.....	**88.1**	**.7**	**.1**	**10.8**	.....	**.3**	**220**
Pears, as purchased:									
Minimum	4	.....	79.6	.....	.1	15.6	.....	.2	300
Maximum	4	.....	83.6	.5	.9	19.5	.....	.3	400
Average	**4**	.....	**81.1**	**.3**	**.3**	**18.0**	.....	**.3**	**355**
Pineapples, as purchased	1	.....	61.8	.4	.7	36.4	.....	.7	715
Prune sauce, as purchased	1	.....	76.6	.5	.1	22.3	.....	.5	430
Strawberries, stewed, as purchased	1	.....	74.8	.7	.....	24.0	.....	.5	460
Tomato preserves, as purchased	1	.....	40.9	.7	.1	57.6	.....	.7	1,090
NUTS.									
Almonds: *b*									
Edible portion—									
Minimum	11	.....	2.0	16.6	48.9	12.8	*1.6*	1.6	2,870
Maximum	11	.....	5.3	25.3	60.0	21.4	*2.5*	2.5	3,145
Average	**11**	.....	**4.8**	**21.0**	**54.9**	**17.3**	*2.0*	**2.0**	**3,030**
As purchased	....	45.0	2.7	11.5	30.2	9.5	.....	1.1	1,660
Beechnuts:									
Edible portion	1	.....	4.0	21.9	57.4	13.2	.....	3.5	3,075
As purchased	1	40.8	2.3	13.0	34.0	7.8	.....	2.1	1,820
"Biotes" (acorns), (*Quercus emoryi*):									
Edible portion	1	.....	4.1	8.1	37.4	48.0	.....	2.4	2,620
As purchased	1	35.6	2.6	5.2	24.1	30.9	.....	1.6	1,690
Brazil nuts (*Bertholletia excelsa*):									
Edible portion	1	.....	5.3	17.0	66.8	7.0	.....	3.9	3,265
As purchased	1	49.6	2.6	8.6	33.7	3.5	.....	2.0	1,655
Butternuts (*Juglans cinerea*):									
Edible portion	1	.....	4.4	27.9	61.2	3.5	.....	2.9	3,165
As purchased	1	86.4	.6	3.8	8.3	.5	.....	.4	430
Chestnuts, fresh: *c*									
Edible portion—									
Minimum	9	.....	29.2	4.1	2.0	36.9	*1.4*	.7	895
Maximum	9	.....	53.8	8.0	10.8	54.0	*2.5*	1.8	1,480
Average	**9**	.....	**45.0**	**6.2**	**5.4**	**42.1**	*1.8*	**1.3**	**1,125**
As purchased	9	16.0	37.8	5.2	4.5	35.4	.....	1.1	945
Chestnuts, dried:									
Edible portion—									
Minimum	8	.....	4.8	8.2	3.9	65.7	*2.4*	1.5	1,815
Maximum	8	.....	6.6	13.5	15.3	80.3	*3.0*	2.9	2,085
Average	**8**	.....	**5.9**	**10.7**	**7.0**	**74.2**	*2.7*	**2.2**	**1,875**
As purchased	8	21.0	4.5	8.1	5.3	56.4	.....	1.7	1,425
Cocoanuts:									
Edible portion	1	.....	14.1	5.7	50.6	27.9	.....	1.7	2,760
As purchased	1	*d*48.8	7.2	2.9	25.9	14.3	.....	.9	1,413
Cocoanut without milk, as purchased	1	*e*37.3	8.9	3.6	31.7	17.5	.....	1.0	1,730
Cocoanut milk, as purchased	1	.....	92.7	.4	1.5	4.6	.....	.8	155
Cocoanut, prepared, as purchased:									
Minimum	2	.....	2.8	6.0	51.0	24.1	.....	1.2	2,990
Maximum	2	.....	4.3	6.5	63.7	39.0	.....	1.4	3,260
Average	**2**	.....	**3.5**	**6.3**	**57.4**	**31.5**	.....	**1.3**	**3,125**

a Fifteen samples of marmalade contain an average of water 30.8, sugar 32.8, invert sugar 32.3, glucose 14.2, acid 0.5, and undetermined 3.6 per cent.

b Fresh almonds contain from 40 to 42 per cent water. The ash of the kernel contains CaO 14.5, MgO 18.3, Na_2O 1.8, K_2O 11, MnO_2 0.3, $Fe_2O_3+Al_2O_3$ 0.8, P_2O_5 48.1, SO_3 4.6, SiO_2, 0.2, and Cl 0.3 per cent.

c The ash of 2 samples contained an average of CaO 4.6, MgO 8, Na_3O_2 1.2, K_2O 48.7, MnO_2 0.2, $Fe_2O_3+Al_2O_3$ 0.4, P_2O_5 23.5, SO_3 12.8, SiO_2 0.2, and Cl 0.3 per cent.

d Milk and shell. *e* Shell only.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.	Fat.	Total carbohydrates (including fiber).	Fiber (number of determinations in parentheses).	Ash.	Fuel value per pound.
VEGETABLE FOOD—Continued.									
NUTS—continued.									
Filberts:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Edible portion	1	.....	3.7	15.6	65.3	13.0	.....	2.4	3,290
As purchased	1	52.1	1.8	7.5	31.3	6.2	.....	1.1	1,575
Hickory nuts:									
Edible portion	1	.....	3.7	15.4	67.4	11.4	.....	2.1	3,345
As purchased	1	62.2	1.4	5.8	25.5	4.3	.....	.8	1,265
Lichi nuts:									
Edible portion	1	.....	17.9	2.9	.2	77.5	.....	1.5	1,505
As purchased	1	41.6	10.5	1.7	.1	45.2	.....	.9	875
Peanuts:									
Edible portion—									
Minimum	4	.....	4.9	19.5	32.3	15.3	*2.0*	1.9	2,415
Maximum	4	.....	13.2	29.1	48.8	40.4	*3.0*	2.4	2,885
Average	**4**	.....	**9.2**	**25.8**	**38.6**	**24.4**	*2.5*	**2.0**	**2,560**
As purchased	....	24.5	6.9	19.5	29.1	18.5	.....	1.5	1,935
Peanut butter, as purchased	2	.....	2.1	29.3	46.5	17.1	.....	*a*5.0	2,825
Pecans, polished:									
Edible portion	1	.....	3.0	11.0	71.2	13.3	.....	1.5	3,455
As purchased	1	53.2	1.4	5.2	33.3	6.2	.....	.7	1,620
Pecans, unpolished:									
Edible portion	1	.....	2.7	9.6	70.5	15.3	.....	1.9	3,435
As purchased	1	46.3	1.5	5.1	37.9	8.2	.....	1.0	1,846
Pine nuts:									
Pignolias, edible portion	1	.....	6.4	33.9	49.4	6.9	.....	3.4	2,845
Piniones (*Pinus monophylla*)—									
Edible portion	1	.....	3.8	6.5	60.7	26.2	.....	2.8	3,170
As purchased	1	41.7	2.2	3.8	35.4	15.3	.....	1.6	1,850
Piñon (*Pinus edulis*)—									
Edible portion	1	.....	3.4	14.6	61.9	17.3	.....	2.8	3,205
As purchased	1	40.6	2.0	8.7	36.8	10.2	.....	1.7	1,905
Pinus sabiniana—									
Edible portion	1	.....	5.1	28.1	53.7	8.4	.....	4.7	2,945
As purchased	1	77.0	1.2	6.5	12.3	1.9	.....	1.1	675
Pistachios:									
First quality, shelled, edible portion	1	.....	4.2	22.3	54.0	16.3	.....	3.2	2,995
Second quality, shelled, edible portion	1	.....	4.3	22.8	54.9	14.9	.....	3.0	3,020
Walnuts, California: *b*									
Edible portion	1	.....	2.5	18.4	64.4	13.0	*1.4*	1.7	3,300
As purchased	1	73.1	.7	4.9	17.3	3.5	.....	.5	885
Walnuts, California, black:									
Edible portion—									
Minimum	2	.....	2.5	24.9	54.7	7.4	*1.6*	1.8	3,070
Maximum	2	.....	2.5	30.3	57.8	16.1	*1.8*	2.0	3,140
Average	**2**	.....	**2.5**	**27.6**	**56.3**	**11.7**	*1.7*	**1.9**	**3,105**
As purchased	....	74.1	.6	7.2	14.6	3.0	.....	.5	805
Walnuts, California, soft shell:									
Edible portion—									
Minimum	4	.....	2.5	14.3	60.0	14.5	*1.4*	1.2	3,195
Maximum	4	.....	2.5	20.4	67.0	19.1	*3.2*	1.6	3,370
Average	**4**	.....	**2.5**	**16.6**	**63.4**	**16.1**	*2.6*	**1.4**	**3,285**
As purchased	....	58.1	1.0	6.9	26.6	6.8	.....	.6	1,375
"Malted nuts," as purchased	1	.....	2.6	23.7	27.6	43.9	.....	2.2	2,240
MISCELLANEOUS.									
Chocolate, as purchased:									
Minimum	2	.....	1.5	12.5	47.1	26.8	.....	1.1	2,720
Maximum	2	.....	10.3	13.4	50.2	33.8	.....	3.3	2,995
Average	**2**	.....	**5.9**	**12.9**	**48.7**	**30.3**	.....	**2.2**	**2,860**
Cocoa, as purchased:									
Minimum	3	.....	3.2	20.6	27.1	35.3	.....	5.4	2,235
Maximum	3	.....	5.4	22.7	31.5	40.6	.....	8.9	2,370
Average	**3**	.....	**4.6**	**21.6**	**28.9**	**37.7**	.....	**7.2**	
Cereal coffee infusion (1 part boiled in 20 parts water) *c*	5	.....	98.2	0.2	.....	1.4	.....	0.2	**2,320** 30
Yeast, compressed, as purchased	1	.....	65.1	11.7	.4	21.0	.....	1.8	625

a 4.1 per cent salt.

b Fresh walnuts contain from 20 to 27 per cent water. The ash of 7 samples of kernel contained an average of CaO 5.6, MgO 16.6, Na_2O 1, K_2O 12.7, MnO_2 0.3, $Fe_2O_3+Al_2O_3$ 3.2, P_2O_5 57.8, SO_3 1.3, SiO_2 0.7, and Cl 0.7 per cent.

c The average of five analyses of cereal coffee grain is: Water 6.2, protein 13.3, fat 3.4, carbohydrates 72.6, and ash 4.5 per cent. Only a portion of the nutrients, however, enter into the infusion. The average in the table represents the available nutrients in the cereal coffee; the figures for refuse represent the "grounds." Infusions of genuine coffee and of tea contain practically no nutrients.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
UNCLASSIFIED FOOD MATERIALS.									
ANIMAL AND VEGETABLE.									
Soups, homemade.									
Beef soup, as purchased:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	2	.....	92.3	2.7	.....	0.3	.....	1.1	110
Maximum	2	.....	93.5	6.2	.....	.5	2.2	1.2	130
Average	**2**	.....	**92.9**	**4.4**	.....	**.4**	**1.1**	**1.2**	**120**
Bean soup, as purchased	1	.....	84.3	3.2	.....	1.4	9.4	1.7	295
Chicken soup, as purchased	1	.....	84.3	10.5	.....	.8	2.4	2.0	275
Clam chowder, as purchased:									
Minimum	2	.....	81.6	.7	.....	.5	2.5	.6	80
Maximum	2	.....	95.7	2.9	.....	1.1	11.0	3.4	305
Average	**2**	.....	**88.7**	**1.8**	.....	**.8**	**6.7**	**2.0**	**195**
Meat stew, as purchased:									
Minimum	5	.....	82.6	3.7	.....	2.0	4.3	1.0	**255**
Maximum	5	.....	87.6	5.6	.....	6.4	7.9	1.3	445
Average	**5**	.....	**84.5**	**4.6**	.....	**4.3**	**5.5**	**1.1**	**370**
Soups, canned.									
Asparagus, cream of, as purchased	1	.....	87.4	2.5	.....	3.2	5.5	1.4	285
Bouillon, as purchased:									
Minimum	3	.....	96.5	1.7	.....	.....	.1	.4	40
Maximum	3	.....	96.7	2.6	.....	.2	.3	1.4	50
Average	**3**	.....	**96.6**	**2.2**	.....	**.1**	**.2**	**.9**	**50**
Celery, cream of, as purchased	1	.....	88.6	2.1	.....	2.8	5.0	1.5	250
Chicken gumbo, as purchased:									
Minimum	2	.....	86.8	3.0	.....	.2	3.8	1.3	135
Maximum	2	.....	91.7	4.6	.....	1.7	5.5	1.4	260
Average	**2**	.....	**89.2**	**3.8**	.....	**.9**	**4.7**	**1.4**	**195**
Chicken soup, as purchased:									
Minimum	2	.....	93.2	3.2	.....	.....	1.2	.9	90
Maximum	2	.....	94.5	3.9	.....	.2	1.7	1.2	105
Average	**2**	.....	**93.8**	**3.6**	.....	**.1**	**1.5**	**1.0**	**100**
Consommé, as purchased	1	.....	96.0	2.5	.....	.....	.4	1.1	55
Cream, corn of, as purchased	1	.....	86.8	2.5	.....	1.9	7.8	1.0	270
Julienne, as purchased	1	.....	95.9	2.7	.....	.....	.5	.9	60
Mock turtle, as purchased:									
Minimum	2	.....	88.9	4.5	.....	.5	1.6	1.2	160
Maximum	2	.....	90.8	5.9	.....	1.3	3.9	1.4	210
Average	**2**	.....	**89.8**	**5.2**	.....	**.9**	**2.8**	**1.3**	**185**
Mulligatawny, as purchased:									
Minimum	2	.....	87.2	3.3	.....	.....	3.8	1.1	145
Maximum	2	.....	91.3	4.1	.....	.3	7.6	1.3	215
Average	**2**	.....	**89.3**	**3.7**	.....	**.1**	**5.7**	**1.2**	**180**
Oxtail:									
Edible portion—									
Minimum	2	.....	88.3	3.9	.....	.5	4.2	1.3	175
Maximum	2	.....	89.4	4.1	.....	2.1	4.3	1.9	245
Average	**2**	.....	**88.8**	**4.0**	.....	**1.3**	**4.3**	**1.6**	**210**
As purchased	1	1.8	87.8	3.8	.....	.5	4.2	1.9	170
Pea soup, as purchased:									
Minimum	4	.....	81.6	1.5	.....	.....	5.1	.7	220
Maximum	4	.....	91.7	5.8	.....	1.6	11.1	1.5	315
Average	**4**	.....	**86.9**	**3.6**	.....	**.7**	**7.6**	**1.2**	**235**
Pea, cream of green, as purchased	1	.....	87.7	2.6	.....	2.7	5.7	1.3	270
Tomato soup, as purchased:									
Minimum	2	.....	89.7	1.7	.....	.9	5.3	1.2	180
Maximum	2	.....	90.4	1.9	.....	1.2	6.0	1.7	185
Average	**2**	.....	**90.0**	**1.8**	.....	**1.1**	**5.6**	**1.5**	**185**
Turtle, green, as purchased	1	.....	86.6	6.1	.....	1.9	3.9	1.5	265
Vegetable, as purchased	1	.....	95.7	2.9	.....	.....	.5	.9	65
Miscellaneous.									
Hash, as purchased	1	.....	80.3	6.0	.....	1.9	9.4	2.4	365
"Infants' and invalids' foods," as purchased: *a*									
Minimum	22	.....	2.4	2.0	.....	.3	66.9	.3	1,615
Maximum	22	.....	12.3	22.5	.....	10.9	89.4	4.5	1,985
Average	**22**	.....	**6.0**	**12.7**	.....	**3.3**	**76.2**	**1.8**	**1,795**

a This includes malted milk, infants' foods, and similar preparations which are sold under various trade names but are similar in composition.

Chemical composition of American food materials—Continued.

Food materials.	Number of analyses.	Refuse.	Water.	Protein.		Fat.	Total carbohydrates.	Ash.	Fuel value per pound.
				N × 6.25.	By difference.				
UNCLASSIFIED FOOD MATERIALS—Cont'd.									
ANIMAL AND VEGETABLE—cont'd.									
Miscellaneous—cont'd.									
Mincemeat, commercial, as purchased:		*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*P. ct.*	*Cals.*
Minimum	3	.....	20.8	1.4	.....	.8	56 7	1.1	1,125
Maximum	3	.....	39.7	14.6	.....	2.2	67.4	7.1	1,420
Average	**3**	.....	**27.7**	**6.7**	.....	**1.4**	**60.2**	**4.0**	**1,305**
Mincemeat, homemade, as purchased:									
Minimum	3	.....	49.6	3.4	.....	4.9	28.6	1.0	900
Maximum	3	.....	56.9	6.3	.....	8.1	34.1	2.5	1,080
Average	**3**	.....	**54.4**	**4.8**	.....	**6.7**	**32.1**	**2.0**	**970**
Salad, ham, as purchased	1	.....	69.4	15.4	.....	7.6	5.6	2.0	710
Sandwich, egg, as purchased	1	.....	41.4	9.6	.....	12.7	34.5	1.8	1,355
Sandwich, chicken, as purchased	1	.....	48.5	12.3	.....	5.4	32.1	1.7	1,055

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